

<400> 323

```

Met His Leu Thr Leu Ser Leu Leu Leu Phe Ser Leu His Phe Pro Thr
 1           5           10           15
Tyr Ile Ile Arg Val Asn Phe Cys Leu Val Ser Asn Leu Phe Gln Arg
      20           25           30
Met Arg Ser Thr Lys Leu Leu Arg Leu Ile Asp Leu Asp Phe Ser Phe
      35           40           45
Thr Phe Ser Leu Leu Asp Leu Pro Pro Val Asn Glu Tyr Asp Met Tyr
      50           55           60
Ile Arg Asn Phe Gly Lys Lys Lys Arg Gly Gly Arg Phe Lys Gly
65           70           75           80
Ser Arg Phe Thr Asn Ala Gly Trp Gln Arg Lys Ser Phe Phe Met Gly
      85           90           95
Pro Pro Lys Ser Ile Pro Gly Ala Gly Val *
      100           105 106

```

<210> 324

<211> 408

<212> PRT

<213> Homo sapiens

<400> 324

```

Met Thr Val Arg Gly Asp Val Leu Ala Pro Asp Pro Ala Ser Pro Thr
 1           5           10           15
Thr Ala Ala Ala Ser Pro Ser Val Ser Val Ile Pro Glu Gly Ser Pro
      20           25           30
Thr Ala Met Glu Gln Pro Val Phe Leu Met Thr Thr Ala Ala Gln Ala
      35           40           45
Ile Ser Gly Phe Phe Val Trp Thr Ala Leu Leu Ile Thr Cys His Gln
      50           55           60
Ile Tyr Met His Leu Arg Cys Tyr Ser Cys Pro Asn Glu Gln Arg Tyr
65           70           75           80
Ile Val Arg Ile Leu Phe Ile Val Pro Ile Tyr Ala Phe Asp Ser Trp
      85           90           95
Leu Ser Leu Leu Phe Phe Thr Asn Asp Gln Tyr Tyr Val Tyr Phe Gly
      100           105           110
Thr Val Arg Asp Cys Tyr Glu Ala Leu Val Ile Tyr Asn Phe Leu Ser
      115           120           125
Leu Cys Tyr Glu Tyr Leu Gly Gly Glu Ser Ser Ile Met Ser Glu Ile
      130           135           140
Arg Gly Lys Pro Ile Glu Ser Ser Cys Met Tyr Gly Thr Cys Cys Leu
145           150           155           160
Trp Gly Lys Thr Tyr Ser Ile Gly Phe Leu Arg Phe Cys Lys Gln Ala
      165           170           175
Thr Leu Gln Phe Cys Val Val Lys Pro Leu Met Ala Val Ser Thr Val
      180           185           190
Val Leu Gln Ala Phe Gly Lys Tyr Arg Asp Gly Asp Phe Asp Val Thr
      195           200           205
Ser Gly Tyr Leu Tyr Val Thr Ile Ile Tyr Asn Ile Ser Val Ser Leu
      210           215           220
Ala Leu Tyr Ala Leu Phe Leu Phe Tyr Phe Ala Thr Arg Glu Leu Leu
225           230           235           240
Ser Pro Tyr Ser Pro Val Leu Lys Phe Phe Met Val Lys Ser Val Ile
      245           250           255
Phe Leu Ser Phe Trp Gln Gly Met Leu Leu Ala Ile Leu Glu Lys Cys
      260           265           270
Gly Ala Ile Pro Lys Ile His Ser Ala Arg Val Ser Val Gly Glu Gly
      275           280           285
Thr Val Ala Ala Gly Tyr Gln Asp Phe Ile Ile Cys Val Glu Met Phe
      290           295           300

```

Phe Ala Ala Leu Ala Leu Arg His Ala Phe Thr Tyr Lys Val Tyr Ala
 305 310 315 320
 Asp Lys Arg Leu Asp Ala Gln Gly Arg Cys Ala Pro Met Lys Ser Ile
 325 330 335
 Ser Ser Ser Leu Lys Glu Thr Met Asn Pro His Asp Ile Val Gln Asp
 340 345 350
 Ala Ile His Asn Phe Ser Pro Ala Tyr Gln Gln Tyr Thr Gln Gln Ser
 355 360 365
 Thr Leu Glu Pro Gly Pro Thr Trp Arg Gly Gly Ala His Gly Leu Ser
 370 375 380
 Arg Ser His Ser Leu Ser Gly Ala Arg Asp Asn Glu Lys Thr Leu Leu
 385 390 395 400
 Leu Ser Ser Asp Asp Glu Phe *
 405 407

<210> 325
 <211> 64
 <212> PRT
 <213> Homo sapiens

<400> 325
 Met Gly Lys Lys Val Thr Leu Leu Leu Gln Lys Cys Ala Trp Leu Leu
 1 5 10 15
 Leu Val Cys Cys Leu Phe Thr Gly Ile Lys Tyr Leu Asn Lys Cys Phe
 20 25 30
 Ile Thr Asp Arg Glu Leu Leu Arg Asp Val His Asn Ala Leu Asn Ile
 35 40 45
 Leu Arg His Asn Phe Tyr Val Asn Trp Ala Ser Leu Asn Thr Phe *
 50 55 60 63

<210> 326
 <211> 97
 <212> PRT
 <213> Homo sapiens

<400> 326
 Met Pro Ser Val Val Leu Asn Met Val Gln Leu Phe Ile Pro Ile Leu
 1 5 10 15
 Lys Phe Gln Leu Gly Tyr Ser Val Leu Ser Leu Cys Asn His Val Leu
 20 25 30
 Glu Phe Leu Phe Pro Ser Ser Leu Ser Gly Ile Phe Ser Ser Ser Leu
 35 40 45
 Pro Leu Leu Leu Pro Phe Pro Leu Ser Leu Pro Ser Leu Pro Pro Ser
 50 55 60
 Leu Phe Pro Ser Leu Arg Val Leu Leu Cys His Pro His Trp Ser Val
 65 70 75 80
 Ala Ser Asn Ser Trp Ala Val Ala Ile Leu Leu Pro Gln Pro Pro Glu
 85 90 95 96
 *

<210> 327
 <211> 103
 <212> PRT
 <213> Homo sapiens

<400> 327

```

Met Met Leu Gly His Met Tyr His Met Ser Val Ile Gln Lys Cys Lys
 1          5          10          15
Pro Leu Asp Thr Asp Ser Thr Ser Gly Asp Ile Phe Ser Gly Ser Tyr
          20          25          30
Gly Trp Cys Ser Pro Thr Ala Leu Tyr Glu Gln Ser Cys Glu Ala His
          35          40          45
Lys His Arg Gly Asn Pro Ser Gly Leu Tyr Tyr Ile Asp Ala Asp Gly
          50          55          60
Ser Gly Pro Leu Gly Pro Phe Leu Val Tyr Cys Asn Met Thr Gly Met
          65          70          75          80
Leu Ile Ile Val Arg Cys Ile Asp Gln Asn Arg Pro Arg Arg Asn Leu
          85          90          95
Pro Ser Trp Gln His Tyr *
          100          102

```

<210> 328

<211> 62

<212> PRT

<213> Homo sapiens

<400> 328

```

Met Lys Lys Gly Val Gly Cys Thr Cys Val Ser Val Cys Pro Cys Met
 1          5          10          15
Cys Val His Pro Tyr Val Cys Thr Cys Ala Cys Met His Val Cys Val
          20          25          30
Cys Leu Cys Ala Trp Cys Leu Ser Gln Pro Gly Gly Leu Gly Gly Phe
          35          40          45
Ser Glu Glu Val Thr Ser Leu Pro Arg Pro Arg Ala Leu *
          50          55          60          61

```

<210> 329

<211> 119

<212> PRT

<213> Homo sapiens

<400> 329

```

Met Leu Phe Leu Lys Lys Ile Gln Phe Leu Lys Cys Asn Lys Val Phe
 1          5          10          15
Arg Ser Leu Asp Phe Cys Val Ala Leu Pro Leu Leu Phe Ser Ser Ser
          20          25          30
Ala Val Leu Gln Ile Thr Pro Val Asp Thr Phe Ser Asp Pro His Leu
          35          40          45
Val Leu Thr Leu Val Lys Leu Leu Met Asn Ile Leu Asn Ile Ala Val
          50          55          60
Ile Ser Leu Thr Phe Pro Gly Glu Tyr Glu Val Ser Leu Ala Phe Glu
          65          70          75          80
Asn Ile Leu Met Tyr Thr His Ala Phe Ile Ile Cys Phe Cys Asn Arg
          85          90          95
Gln Trp Leu Phe Lys Ser Asn Ser Glu Ser Asn Leu Ser Ser Asn Val
          100          105          110
Asn Leu Phe Asp Ser Cys *
          115          118

```

<210> 330

<211> 111
 <212> PRT
 <213> Homo sapiens

<400> 330
 Met Gln Leu His Gly Lys Gly Ser Gln Asp Pro Ser Thr Lys Gly His
 1 5 10 15
 Ile Lys Ala Leu Gln Thr Val Thr Ser Phe Leu Leu Leu Cys Ala Ile
 20 25 30
 Tyr Phe Leu Ser Met Ile Ile Ser Val Cys Asn Phe Gly Arg Leu Glu
 35 40 45
 Lys Gln Pro Val Phe Met Phe Cys Gln Ala Ile Ile Phe Ser Tyr Pro
 50 55 60
 Ser Thr His Pro Phe Ile Leu Ile Leu Gly Asn Lys Lys Leu Lys Gln
 65 70 75 80
 Ile Phe Leu Ser Val Leu Arg His Val Arg Tyr Trp Val Lys Asp Arg
 85 90 95
 Ser Leu Arg Leu His Arg Phe Thr Arg Gly Ala Leu Cys Val Phe
 100 105 110 111

<210> 331
 <211> 318
 <212> PRT
 <213> Homo sapiens

<400> 331
 Met Ala Pro Trp Ala Glu Ala Glu His Ser Ala Leu Asn Pro Leu Arg
 1 5 10 15
 Ala Val Trp Leu Thr Leu Thr Ala Ala Phe Leu Leu Thr Leu Leu Leu
 20 25 30
 Gln Leu Leu Pro Pro Gly Leu Leu Pro Gly Cys Ala Ile Phe Gln Asp
 35 40 45
 Leu Ile Arg Tyr Gly Lys Thr Lys Cys Gly Glu Pro Ser Arg Pro Ala
 50 55 60
 Ala Cys Arg Ala Phe Asp Val Pro Lys Arg Tyr Phe Ser His Phe Tyr
 65 70 75 80
 Ile Ile Ser Val Leu Trp Asn Gly Phe Leu Leu Trp Cys Leu Thr Gln
 85 90 95
 Ser Leu Phe Leu Gly Ala Pro Phe Pro Ser Trp Leu His Gly Leu Leu
 100 105 110
 Arg Ile Leu Gly Ala Ala Gln Phe Gln Gly Gly Glu Leu Ala Leu Ser
 115 120 125
 Ala Phe Leu Val Leu Val Phe Leu Trp Leu His Ser Leu Arg Arg Leu
 130 135 140
 Phe Glu Cys Leu Tyr Val Ser Val Phe Ser Asn Val Met Ile His Val
 145 150 155 160
 Val Gln Tyr Cys Phe Gly Leu Val Tyr Tyr Val Leu Val Gly Leu Thr
 165 170 175
 Val Leu Ser Gln Val Pro Met Asp Gly Arg Asn Ala Tyr Ile Thr Gly
 180 185 190
 Lys Asn Leu Leu Met Gln Ala Arg Trp Phe His Ile Leu Gly Met Met
 195 200 205
 Met Phe Ile Trp Ser Ser Ala His Gln Tyr Lys Cys His Val Ile Leu
 210 215 220
 Gly Asn Leu Arg Lys Asn Lys Ala Gly Val Val Ile His Cys Asn His
 225 230 235 240
 Arg Ile Pro Phe Gly Asp Trp Phe Glu Tyr Val Ser Ser Pro Asn Tyr
 245 250 255
 Leu Ala Glu Leu Met Ile Tyr Val Ser Met Ala Val Thr Phe Gly Phe
 260 265 270

His Asn Leu Thr Trp Trp Leu Val Val Thr Asn Val Phe Phe Asn Gln
 275 280 285
 Ala Leu Ser Ala Phe Leu Ser His Gln Phe Tyr Lys Ser Lys Phe Val
 290 295 300
 Ser Tyr Pro Lys His Arg Lys Ala Phe Leu Pro Phe Leu Phe
 305 310 315 318

<210> 332
 <211> 308
 <212> PRT
 <213> Homo sapiens

<400> 332
 Met Glu Phe Gly Leu Ser Trp Leu Phe Leu Val Ala Ile Leu Lys Gly
 1 5 10 15
 Val Gln Cys Glu Val Gln Leu Leu Glu Ser Gly Gly Gly Leu Val Gln
 20 25 30
 Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe
 35 40 45
 Ser Ser Phe Ser Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu
 50 55 60
 Glu Trp Val Ser Ser Ile Ser Gly Ser Ser Gly Thr Thr Tyr Tyr Ala
 65 70 75 80
 Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn
 85 90 95
 Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val
 100 105 110
 Tyr Tyr Cys Ala Lys Pro Phe Pro Tyr Phe Asp Tyr Trp Gly Gln Gly
 115 120 125
 Thr Leu Val Thr Val Ser Ser Gly Asp Gly Ser Ser Gly Gly Ser Gly
 130 135 140
 Gly Ala Ser Thr Gly Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu
 145 150 155 160
 Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln
 165 170 175
 Ser Val Ser Ser Ser Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln
 180 185 190
 Ala Pro Arg Leu Leu Ile Tyr Gly Ala Ser Ser Arg Ala Thr Gly Ile
 195 200 205
 Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
 210 215 220
 Ile Ser Arg Leu Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln
 225 230 235 240
 Thr Gly Arg Ile Pro Pro Thr Phe Gly Gln Gly Thr Lys Val Glu Ile
 245 250 255
 Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp
 260 265 270
 Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn
 275 280 285
 Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu
 290 295 300
 Pro Ile Gly *
 305 307

<210> 333
 <211> 160
 <212> PRT
 <213> Homo sapiens

<400> 333
 Met Glu Phe Gly Leu Ser Trp Leu Phe Leu Val Ala Ile Leu Lys Gly
 1 5 10 15
 Val Gln Cys Glu Val Gln Leu Leu Glu Ser Gly Gly Gly Leu Val Gln
 20 25 30
 Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe
 35 40 45
 Asp Ser Tyr Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu
 50 55 60
 Asp Trp Val Ser Ala Val Ser Gly Gly Gly Ser Thr Tyr Tyr Ala
 65 70 75 80
 Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Ser
 85 90 95
 Thr Met Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Met
 100 105 110
 Tyr Tyr Cys Ala Lys Asp Asn Tyr Asp Phe Trp Ser Gly Thr Phe Asp
 115 120 125
 Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys
 130 135 140
 Gly Pro Ser Val Val Ala Gly Ala Arg Arg Leu Ala Lys Leu Cys *
 145 150 155 159

<210> 334
 <211> 313
 <212> PRT
 <213> Homo sapiens

<400> 334
 Met Glu Phe Gly Leu Ser Trp Leu Phe Leu Val Ala Ile Leu Lys Gly
 1 5 10 15
 Val Gln Cys Glu Val Gln Leu Leu Glu Ser Gly Gly Gly Leu Val Gln
 20 25 30
 Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Thr Gly Phe Thr Phe
 35 40 45
 Ser Ser Tyr Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu
 50 55 60
 Glu Trp Val Ser Glu Ile Ile Ser Ser Gly Gly Thr Thr Tyr Tyr Ala
 65 70 75 80
 Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn
 85 90 95
 Thr Leu Tyr Leu Gln Met Asn Gly Met Arg Ala Glu Asp Thr Ala Ile
 100 105 110
 Tyr Tyr Cys Ala Lys Asp Ile Ile Ser Asp Ser Trp Arg Tyr Phe Asp
 115 120 125
 Tyr Trp Gly Gln Gly Ala Leu Val Thr Val Ser Ser Gly Asp Gly Ser
 130 135 140
 Ser Gly Gly Ser Gly Gly Ala Ser Thr Gly Glu Ile Val Leu Thr Gln
 145 150 155 160
 Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser
 165 170 175
 Cys Arg Ala Ser Gln Ser Val Ser Ser Ser Tyr Leu Ala Trp Tyr Gln
 180 185 190
 Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile Tyr Gly Ala Ser Ser
 195 200 205
 Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr
 210 215 220
 Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu Asp Phe Ala Val
 225 230 235 240
 Tyr Tyr Cys Gln Gln Thr Gly Arg Ile Pro Pro Thr Phe Gly Gln Gly
 245 250 255

Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile
 260 265 270
 Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val
 275 280 285
 Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys
 290 295 300
 Val Asp Asn Ala Leu Pro Ile Gly *
 305 310 312

<210> 335
 <211> 364
 <212> PRT
 <213> Homo sapiens

<400> 335
 Met Glu Phe Gly Leu Ser Trp Leu Phe Leu Val Ala Ile Leu Lys Gly
 1 5 10 15
 Val Gln Cys Glu Val Gln Leu Leu Glu Ser Gly Gly Gly Leu Val Gln
 20 25 30
 Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe
 35 40 45
 Ser Ser Phe Ser Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu
 50 55 60
 Glu Trp Val Ser Ser Ile Ser Gly Ser Ser Gly Thr Thr Tyr Tyr Ala
 65 70 75 80
 Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn
 85 90 95
 Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val
 100 105 110
 Tyr Tyr Cys Ala Lys Pro Phe Pro Tyr Phe Asp Tyr Trp Gly Gln Gly
 115 120 125
 Thr Leu Val Thr Val Ser Ser Gly Asp Gly Ser Ser Gly Gly Ser Val
 130 135 140
 Thr Val Ser Ser Ser Asp Ile Gln Met Thr Gln Ser Pro Ser Thr Leu
 145 150 155 160
 Ser Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln
 165 170 175
 Ser Ile Ser Ser Trp Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala
 180 185 190
 Pro Lys Leu Leu Ile Tyr Lys Ala Ser Ser Leu Glu Ser Gly Val Pro
 195 200 205
 Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile
 210 215 220
 Ser Ser Leu Gln Pro Asp Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Tyr
 225 230 235 240
 Val Tyr Tyr Pro Leu Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
 245 250 255
 Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu
 260 265 270
 Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe
 275 280 285
 Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln
 290 295 300
 Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser
 305 310 315 320
 Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu
 325 330 335
 Lys His Lys Leu Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser
 340 345 350
 Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys *
 355 360 363

<210> 336
 <211> 47
 <212> PRT
 <213> Homo sapiens

<400> 336
 Met Phe Pro Pro Tyr Phe Ser Leu Ile Leu Leu Leu Phe Thr Phe Ala
 1 5 10 15
 Ser Lys Phe Phe Leu Ser Leu Asn Leu Lys Lys Ser Asn Ile Val Lys
 20 25 30
 Ala Arg Ile Glu Ser Thr Lys Thr Val Ile Ser Lys Arg Cys *
 35 40 45 46

<210> 337
 <211> 79
 <212> PRT
 <213> Homo sapiens

<400> 337
 Met Ala Met Gln Ser Val Ile Arg Lys Gln Phe Thr Ala Leu Ala Gly
 1 5 10 15
 Phe Cys Phe Trp Phe Cys Leu Phe Thr Leu Ala Val Leu Ser Leu Thr
 20 25 30
 Leu Leu Ile Cys Lys Leu Arg Ile Met Pro Phe Lys Leu Glu Gly Leu
 35 40 45
 Phe Gln Glu Leu Asn Lys Ser Trp His Met Lys Leu Leu Ser Gln Asp
 50 55 60
 Arg Glu Leu Ile Asn Met Leu Leu Leu Leu Met Gly Arg Ser *
 65 70 75 78

<210> 338
 <211> 1189
 <212> PRT
 <213> Homo sapiens

<400> 338
 Met Asp Leu Pro Arg Gly Leu Val Val Ala Trp Ala Leu Ser Leu Trp
 1 5 10 15
 Pro Gly Phe Thr Asp Thr Phe Asn Met Asp Thr Arg Lys Pro Arg Val
 20 25 30
 Ile Pro Gly Ser Arg Thr Ala Phe Phe Gly Tyr Thr Val Gln Gln His
 35 40 45
 Asp Ile Ser Gly Asn Lys Trp Leu Val Val Gly Ala Pro Leu Glu Thr
 50 55 60
 Asn Gly Tyr Gln Lys Thr Gly Asp Val Tyr Lys Cys Pro Val Ile His
 65 70 75 80
 Gly Asn Cys Thr Lys Leu Asn Leu Gly Arg Val Thr Leu Ser Asn Val
 85 90 95
 Ser Glu Arg Lys Asp Asn Met Arg Leu Gly Leu Ser Leu Ala Thr Asn
 100 105 110
 Pro Lys Asp Asn Ser Phe Leu Ala Cys Ser Pro Leu Trp Ser His Glu
 115 120 125
 Cys Gly Ser Ser Tyr Tyr Thr Thr Gly Met Cys Ser Arg Val Asn Ser
 130 135 140

Asn Phe Arg Phe Ser Lys Thr Val Ala Pro Ala Leu Gln Arg Cys Gln
 145 150 155 160
 Thr Tyr Met Asp Ile Val Ile Val Leu Asp Gly Ser Asn Ser Ile Tyr
 165 170 175
 Pro Trp Val Glu Val Gln His Phe Leu Ile Asn Ile Leu Lys Lys Phe
 180 185 190
 Tyr Ile Gly Pro Gly Gln Ile Gln Val Gly Val Val Gln Tyr Gly Glu
 195 200 205
 Asp Val Val His Glu Phe His Leu Asn Asp Tyr Arg Ser Val Lys Asp
 210 215 220
 Val Val Glu Ala Ala Ser His Ile Glu Gln Arg Gly Gly Thr Glu Thr
 225 230 235 240
 Arg Thr Ala Phe Gly Ile Glu Phe Ala Arg Ser Glu Ala Phe Gln Lys
 245 250 255
 Gly Gly Arg Lys Gly Ala Lys Lys Val Met Ile Val Ile Thr Asp Gly
 260 265 270
 Glu Ser His Asp Ser Pro Asp Leu Glu Lys Val Ile Gln Gln Ser Glu
 275 280 285
 Arg Asp Asn Val Thr Arg Tyr Ala Val Ala Val Leu Gly Tyr Tyr Asn
 290 295 300
 Arg Arg Gly Ile Asn Pro Glu Thr Phe Leu Asn Glu Ile Lys Tyr Ile
 305 310 315 320
 Ala Ser Asp Pro Asp Asp Lys His Phe Phe Asn Val Thr Asp Glu Ala
 325 330 335
 Ala Leu Lys Asp Ile Val Asp Ala Leu Gly Asp Arg Ile Phe Ser Leu
 340 345 350
 Glu Gly Thr Asn Lys Asn Glu Thr Ser Phe Gly Leu Glu Met Ser Gln
 355 360 365
 Thr Gly Phe Ser Ser His Val Val Glu Asp Gly Val Leu Leu Gly Ala
 370 375 380
 Val Gly Ala Tyr Asp Trp Asn Gly Ala Val Leu Lys Glu Thr Ser Ala
 385 390 395 400
 Gly Lys Val Ile Pro Leu Arg Glu Ser Tyr Leu Lys Glu Phe Pro Glu
 405 410 415
 Glu Leu Lys Asn His Gly Ala Tyr Leu Gly Tyr Thr Val Thr Ser Val
 420 425 430
 Val Ser Ser Arg Gln Gly Arg Val Tyr Val Ala Gly Ala Pro Arg Phe
 435 440 445
 Asn His Thr Gly Lys Val Ile Leu Phe Thr Met His Asn Asn Arg Ser
 450 455 460
 Leu Thr Ile His Gln Ala Met Arg Gly Gln Gln Ile Gly Ser Tyr Phe
 465 470 475 480
 Gly Ser Glu Ile Thr Ser Val Asp Ile Asp Gly Asp Gly Val Thr Asp
 485 490 495
 Val Leu Leu Val Gly Ala Pro Met Tyr Phe Asn Glu Gly Arg Glu Arg
 500 505 510
 Gly Lys Val Tyr Val Tyr Glu Leu Arg Gln Asn Arg Phe Val Tyr Asn
 515 520 525
 Gly Thr Leu Lys Asp Ser His Ser Tyr Gln Asn Ala Arg Phe Gly Ser
 530 535 540
 Ser Ile Ala Ser Val Arg Asp Leu Asn Gln Asp Ser Tyr Asn Asp Val
 545 550 555 560
 Val Val Gly Ala Pro Leu Glu Asp Asn His Ala Gly Ala Ile Tyr Ile
 565 570 575
 Phe His Gly Phe Arg Gly Ser Ile Leu Lys Thr Pro Lys Gln Arg Ile
 580 585 590
 Thr Ala Ser Glu Leu Ala Thr Gly Leu Gln Tyr Phe Gly Cys Ser Ile
 595 600 605
 His Gly Gln Leu Asp Leu Asn Glu Asp Gly Leu Ile Asp Leu Ala Val
 610 615 620
 Gly Ala Leu Gly Asn Ala Val Ile Leu Trp Ser Arg Pro Val Val Gln
 625 630 635 640
 Ile Asn Ala Ser Leu His Phe Glu Pro Ser Lys Ile Asn Ile Phe His
 645 650 655

Arg Asp Cys Lys Arg Ser Gly Arg Asp Ala Thr Cys Leu Ala Ala Phe
 660 665 670
 Leu Cys Phe Thr Pro Ile Phe Leu Ala Pro His Phe Gln Thr Thr Thr
 675 680 685
 Val Gly Ile Arg Tyr Asn Ala Thr Met Asp Glu Arg Arg Tyr Thr Pro
 690 695 700
 Arg Ala His Leu Asp Glu Gly Gly Asp Arg Phe Thr Asn Arg Ala Val
 705 710 715 720
 Leu Leu Ser Ser Gly Gln Glu Leu Cys Glu Arg Ile Asn Phe His Val
 725 730 735
 Leu Asp Thr Ala Asp Tyr Val Lys Pro Val Thr Phe Ser Val Glu Tyr
 740 745 750
 Ser Leu Glu Asp Pro Asp His Gly Pro Met Leu Asp Asp Gly Trp Pro
 755 760 765
 Thr Thr Leu Arg Val Ser Val Pro Phe Trp Asn Gly Cys Asn Glu Asp
 770 775 780
 Glu His Cys Val Pro Asp Leu Val Leu Asp Ala Arg Ser Asp Leu Pro
 785 790 795 800
 Thr Ala Met Glu Tyr Cys Gln Arg Val Leu Arg Lys Pro Ala Gln Asp
 805 810 815
 Cys Ser Ala Tyr Thr Leu Ser Phe Asp Thr Thr Val Phe Ile Ile Glu
 820 825 830
 Ser Thr Arg Gln Arg Val Ala Val Glu Ala Thr Leu Glu Asn Arg Gly
 835 840 845
 Glu Asn Ala Tyr Ser Thr Val Leu Asn Ile Ser Gln Ser Ala Asn Leu
 850 855 860
 Gln Phe Ala Ser Leu Ile Gln Lys Glu Asp Ser Asp Gly Ser Ile Glu
 865 870 875 880
 Cys Val Asn Glu Glu Arg Arg Leu Gln Lys Gln Val Cys Asn Val Ser
 885 890 895
 Tyr Pro Phe Phe Arg Ala Lys Ala Lys Val Ala Phe Arg Leu Asp Phe
 900 905 910
 Glu Phe Ser Lys Ser Ile Phe Leu His His Leu Glu Ile Glu Leu Ala
 915 920 925
 Ala Gly Ser Asp Ser Asn Glu Arg Asp Ser Thr Lys Glu Asp Asn Val
 930 935 940
 Ala Pro Leu Arg Phe His Leu Lys Tyr Glu Ala Asp Val Leu Phe Thr
 945 950 955 960
 Arg Ser Ser Ser Leu Ser His Tyr Glu Val Lys Pro Asn Ser Ser Leu
 965 970 975
 Glu Arg Tyr Asp Gly Ile Gly Pro Pro Phe Ser Cys Ile Phe Arg Ile
 980 985 990
 Gln Asn Leu Gly Leu Phe Pro Ile His Gly Met Met Met Lys Ile Thr
 995 1000 1005
 Ile Pro Ile Ala Thr Arg Ser Gly Asn Arg Leu Leu Lys Leu Arg Asp
 1010 1015 1020
 Phe Leu Thr Asp Glu Ala Asn Thr Ser Cys Asn Ile Trp Gly Asn Ser
 1025 1030 1035 1040
 Thr Glu Tyr Arg Pro Thr Pro Val Glu Glu Asp Leu Arg Arg Ala Pro
 1045 1050 1055
 Gln Leu Asn His Ser Asn Ser Asp Val Val Ser Ile Asn Cys Asn Ile
 1060 1065 1070
 Arg Leu Val Pro Asn Gln Glu Ile Asn Phe His Leu Leu Gly Asn Leu
 1075 1080 1085
 Trp Leu Arg Ser Leu Lys Ala Leu Lys Tyr Lys Ser Met Lys Ile Met
 1090 1095 1100
 Val Asn Ala Ala Leu Gln Arg Gln Phe His Ser Pro Phe Ile Phe Arg
 1105 1110 1115 1120
 Glu Glu Asp Pro Ser Arg Gln Ile Val Phe Glu Ile Ser Lys Gln Glu
 1125 1130 1135
 Asp Trp Gln Val Pro Ile Trp Ile Ile Val Gly Ser Thr Leu Gly Gly
 1140 1145 1150
 Leu Leu Leu Leu Ala Leu Leu Val Leu Ala Leu Trp Lys Leu Gly Phe
 1155 1160 1165

Phe Arg Ser Ala Arg Arg Arg Arg Glu Pro Gly Leu Asp Pro Thr Pro
 1170 1175 1180
 Lys Val Leu Glu *
 1185 1188

<210> 339
 <211> 53
 <212> PRT
 <213> Homo sapiens

<400> 339
 Met Ala Leu Asn Ile Ile Ile Asn Pro Val Trp Phe Cys His Cys Leu
 1 5 10 15
 Thr Cys Thr Ile His Ile Asp Phe His Ile Leu Phe Ile Lys Ile Phe
 20 25 30
 Lys His Met Phe Phe Arg Ser Leu Trp Ser Ser Trp Leu Ser His Gln
 35 40 45
 Leu Asp His Ile *
 50 52

<210> 340
 <211> 78
 <212> PRT
 <213> Homo sapiens

<400> 340
 Met Ala Ile Phe Pro Leu Trp Lys Leu Leu Asn Val Leu Val Cys Ile
 1 5 10 15
 Phe Ser Ser Phe Ile Met Leu Asn Ile Tyr Cys Thr Leu Leu Ile Trp
 20 25 30
 Lys Phe Ile Tyr Ser Ala Phe Phe Cys Tyr Ile Thr Ser Leu Met Ile
 35 40 45
 Phe Pro Phe Ser Phe Phe Cys Ser Phe Phe Leu Asp Leu Leu Lys Val
 50 55 60
 Ile Val Tyr Ile Phe Phe Leu Tyr Leu Tyr Ser Ser Arg *
 65 70 75 77

<210> 341
 <211> 49
 <212> PRT
 <213> Homo sapiens

<400> 341
 Met Gly Tyr Leu Leu Trp Leu Val Leu Ser Ile Leu Val Cys Thr Glu
 1 5 10 15
 Leu Gly Leu Gly Arg Leu Thr Phe Pro Leu Asp Ser Glu Ser Pro Arg
 20 25 30
 Thr Ser Tyr Lys Val Arg Pro Trp Val Val Leu Glu Ala Trp Val Trp
 35 40 45 48
 *

<210> 342

<211> 137
 <212> PRT
 <213> Homo sapiens

<400> 342
 Met Ser Gly Ser Gly Met Glu Leu Leu Met Asp Thr Gly Lys Glu Asp
 1 5 10 15
 Glu Val Ile Val Trp Ala Gln Met Cys Leu Ser His Leu Val Ser Leu
 20 25 30
 Phe Pro Ala Ala Thr Ala Phe Leu Ile Asn Lys Val Pro Leu Pro Val
 35 40 45
 Asp Lys Leu Ala Pro Leu Pro Leu Asp Asn Ile Leu Pro Phe Met Asp
 50 55 60
 Pro Leu Lys Leu Leu Leu Lys Thr Leu Gly Ile Ser Val Glu His Leu
 65 70 75 80
 Val Glu Gly Leu Arg Lys Cys Val Asn Glu Leu Arg Pro Glu Ala Ser
 85 90 95
 Glu Ala Val Lys Lys Leu Leu Val Thr Thr Ala Trp Glu Ala Asn Leu
 100 105 110
 Pro Lys Gly Arg His Thr His Pro Glu Cys Leu Ala Pro Leu Leu Val
 115 120 125
 Pro Cys Lys Cys Ala Phe Pro Leu Tyr
 130 135 137

<210> 343
 <211> 233
 <212> PRT
 <213> Homo sapiens

<400> 343
 Met Ala Trp Ile Pro Leu Phe Leu Gly Val Leu Ala Tyr Cys Thr Gly
 1 5 10 15
 Ser Val Ala Ser Tyr Glu Leu Thr Gln Pro Pro Ser Val Ser Val Ser
 20 25 30
 Pro Gly Gln Thr Ala Ser Ile Thr Cys Ser Gly Asp Lys Leu Gly Asp
 35 40 45
 Lys Tyr Ala Cys Trp Tyr Gln Gln Lys Pro Gly Gln Ser Pro Val Leu
 50 55 60
 Val Ile Tyr Gln Asp Ser Lys Arg Pro Ser Gly Ile Pro Glu Arg Phe
 65 70 75 80
 Ser Gly Ser Asn Ser Gly Asn Thr Ala Thr Leu Thr Ile Ser Gly Thr
 85 90 95
 Gln Ala Met Asp Glu Ala Asp Tyr Tyr Cys Gln Ala Trp Asp Ser Ser
 100 105 110
 Thr Leu Tyr Val Phe Gly Thr Gly Thr Lys Val Thr Val Leu Gly Gln
 115 120 125
 Pro Lys Ala Asn Pro Thr Val Thr Leu Phe Pro Pro Ser Ser Glu Glu
 130 135 140
 Leu Gln Ala Asn Lys Ala Thr Leu Val Cys Leu Ile Ser Asp Phe Tyr
 145 150 155 160
 Pro Gly Ala Val Thr Val Ala Trp Lys Ala Asp Gly Ser Pro Val Lys
 165 170 175
 Ala Gly Val Glu Thr Thr Lys Pro Ser Lys Gln Ser Asn Asn Lys Tyr
 180 185 190
 Ala Ala Ser Ser Tyr Leu Ser Leu Thr Pro Glu Gln Trp Lys Ser His
 195 200 205
 Arg Ser Tyr Ser Cys Gln Val Thr His Glu Gly Ser Thr Val Glu Lys
 210 215 220
 Thr Val Ala Pro Thr Glu Cys Ser *
 225 230 232

<210> 344
 <211> 270
 <212> PRT
 <213> Homo sapiens

<400> 344
 Met Leu Gln Thr Leu Asn Glu Glu Pro Val Thr Pro Glu Pro Glu Val
 1 5 10 15
 Glu Pro Pro Ser Ala Pro Glu Leu Lys Gln Gly Leu Tyr Glu Leu Ser
 20 25 30
 Ala Ser Asn Phe Glu Leu His Val Ala Gln Gly Asp His Phe Ile Lys
 35 40 45
 Phe Phe Ala Pro Trp Cys Gly His Cys Lys Ala Leu Ala Pro Thr Trp
 50 55 60
 Glu Gln Leu Ala Leu Gly Leu Glu His Ser Glu Thr Val Lys Ile Gly
 65 70 75 80
 Lys Val Asp Cys Thr Gln His Tyr Glu Leu Cys Ser Gly Asn Gln Val
 85 90 95
 Arg Gly Tyr Pro Thr Leu Leu Trp Phe Arg Asp Gly Lys Lys Val Asp
 100 105 110
 Gln Tyr Lys Gly Lys Arg Asp Leu Glu Ser Leu Arg Glu Tyr Val Glu
 115 120 125
 Ser Gln Leu Gln Arg Thr Glu Thr Gly Ala Thr Glu Thr Val Thr Pro
 130 135 140
 Ser Glu Ala Pro Val Leu Ala Ala Glu Pro Glu Ala Asp Lys Gly Thr
 145 150 155 160
 Val Leu Ala Leu Thr Glu Asn Asn Phe Asp Asp Thr Ile Ala Glu Gly
 165 170 175
 Ile Thr Phe Ile Lys Phe Tyr Ala Pro Trp Cys Gly His Cys Lys Thr
 180 185 190
 Leu Ala Pro Thr Trp Glu Glu Leu Ser Lys Lys Glu Phe Pro Gly Leu
 195 200 205
 Ala Gly Val Lys Ile Ala Glu Val Asp Cys Thr Ala Glu Arg Asn Ile
 210 215 220
 Cys Ser Lys Tyr Ser Val Arg Gly Tyr Pro Thr Leu Leu Leu Phe Arg
 225 230 235 240
 Gly Gly Lys Lys Val Ser Glu His Ser Gly Gly Arg Asp Leu Asp Ser
 245 250 255
 Leu His Arg Phe Val Leu Ser Gln Ala Lys Asp Glu Leu *
 260 265 269

<210> 345
 <211> 311
 <212> PRT
 <213> Homo sapiens

<400> 345
 Met Leu Leu Leu Leu Leu Leu Gly Pro Gly Ser Gly Leu Gly Ala
 1 5 10 15
 Val Val Ser Gln His Pro Ser Arg Val Ile Cys Lys Ser Gly Thr Ser
 20 25 30
 Val Lys Ile Glu Cys Arg Ser Leu Asp Phe Gln Ala Thr Thr Met Phe
 35 40 45
 Trp Tyr Arg Gln Phe Pro Lys Gln Ser Leu Met Leu Met Ala Thr Ser
 50 55 60
 Asn Glu Gly Ser Lys Ala Thr Tyr Glu Gln Gly Val Glu Lys Asp Lys
 65 70 75 80

Phe Leu Ile Asn His Ala Ser Leu Thr Leu Ser Thr Leu Thr Val Thr
 85 90 95
 Ser Ala His Pro Glu Asp Ser Ser Phe Tyr Ile Cys Ser Ala Arg Glu
 100 105 110
 Ser Thr Ser Asp Pro Lys Asn Glu Gln Phe Phe Gly Pro Gly Thr Arg
 115 120 125
 Leu Thr Val Thr Glu Asp Leu Lys Asn Val Phe Pro Pro Glu Val Ala
 130 135 140
 Val Phe Glu Pro Ser Glu Ala Glu Ile Ser His Thr Gln Lys Ala Thr
 145 150 155 160
 Leu Val Cys Leu Ala Thr Gly Phe Tyr Pro Asp His Val Glu Leu Ser
 165 170 175
 Trp Trp Val Asn Gly Lys Glu Val His Ser Gly Val Ser Thr Asp Pro
 180 185 190
 Gln Pro Leu Lys Glu Gln Pro Ala Leu Asn Asp Ser Arg Tyr Cys Leu
 195 200 205
 Ser Ser Arg Leu Arg Val Ser Ala Thr Phe Trp Gln Asn Pro Arg Asn
 210 215 220
 His Phe Arg Cys Gln Val Gln Phe Tyr Gly Leu Ser Glu Asn Asp Glu
 225 230 235 240
 Trp Thr Gln Asp Arg Ala Lys Pro Val Thr Gln Ile Val Ser Ala Glu
 245 250 255
 Ala Trp Gly Arg Ala Asp Cys Gly Phe Thr Ser Glu Ser Tyr Gln Gln
 260 265 270
 Gly Val Leu Ser Ala Thr Ile Leu Tyr Glu Ile Leu Leu Gly Lys Ala
 275 280 285
 Thr Leu Tyr Ala Val Leu Val Ser Ala Leu Val Leu Met Ala Met Val
 290 295 300
 Lys Arg Lys Asp Ser Arg Gly
 305 310 311

<210> 346
 <211> 552
 <212> PRT
 <213> Homo sapiens

<400> 346
 Met Leu Pro Leu Leu Leu Pro Leu Leu Trp Gly Gly Ser Leu Gln
 1 5 10 15
 Glu Lys Pro Val Tyr Glu Leu Gln Val Gln Lys Ser Val Thr Val Gln
 20 25 30
 Glu Gly Leu Cys Val Leu Val Pro Cys Ser Phe Ser Tyr Pro Trp Arg
 35 40 45
 Ser Trp Tyr Ser Ser Pro Pro Leu Tyr Val Tyr Trp Phe Arg Asp Gly
 50 55 60
 Glu Ile Pro Tyr Tyr Ala Glu Val Val Ala Thr Asn Asn Pro Asp Arg
 65 70 75 80
 Arg Val Lys Pro Glu Thr Gln Gly Arg Phe Arg Leu Leu Gly Asp Val
 85 90 95
 Gln Lys Lys Asn Cys Ser Leu Ser Ile Gly Asp Ala Arg Met Glu Asp
 100 105 110
 Thr Gly Ser Tyr Phe Phe Arg Val Glu Arg Gly Arg Asp Val Lys Tyr
 115 120 125
 Ser Tyr Gln Gln Asn Lys Leu Asn Leu Glu Val Thr Ala Leu Ile Glu
 130 135 140
 Lys Pro Asp Ile His Phe Leu Glu Pro Leu Glu Ser Gly Arg Pro Thr
 145 150 155 160
 Arg Leu Ser Cys Ser Leu Pro Gly Ser Cys Glu Ala Gly Pro Pro Leu
 165 170 175
 Thr Phe Ser Trp Thr Gly Asn Ala Leu Ser Pro Leu Asp Pro Glu Thr
 180 185 190

```

Thr Arg Ser Ser Glu Leu Thr Leu Thr Pro Arg Pro Glu Asp His Gly
      195                200                205
Thr Asn Leu Thr Cys Gln Met Lys Arg Gln Gly Ala Gln Val Thr Thr
      210                215                220
Glu Arg Thr Val Gln Leu Asn Val Ser Tyr Ala Pro Gln Thr Ile Thr
      225                230                235                240
Ile Phe Arg Asn Gly Ile Ala Leu Glu Ile Leu Gln Asn Thr Ser Tyr
      245                250                255
Leu Pro Val Leu Glu Gly Gln Ala Leu Arg Leu Leu Cys Asp Ala Pro
      260                265                270
Ser Asn Pro Pro Ala His Leu Ser Trp Phe Gln Gly Ser Pro Ala Leu
      275                280                285
Asn Ala Thr Pro Ile Ser Asn Thr Gly Ile Leu Glu Leu Arg Arg Val
      290                295                300
Arg Ser Ala Glu Glu Gly Phe Thr Cys Arg Ala Gln His Pro Leu
      305                310                315                320
Gly Ser Leu Gln Ile Phe Leu Asn Leu Ser Val Tyr Ser Leu Pro Gln
      325                330                335
Leu Leu Gly Pro Ser Cys Ser Trp Glu Ala Glu Gly Leu His Cys Arg
      340                345                350
Cys Ser Phe Arg Ala Arg Pro Ala Pro Ser Leu Cys Trp Arg Leu Glu
      355                360                365
Glu Lys Pro Leu Glu Gly Asn Ser Ser Gln Gly Ser Phe Lys Val Asn
      370                375                380
Ser Ser Ser Ala Gly Pro Trp Ala Asn Ser Ser Leu Ile Leu His Gly
      385                390                395                400
Gly Leu Ser Ser Asp Leu Lys Val Ser Cys Lys Ala Trp Asn Ile Tyr
      405                410                415
Gly Ser Gln Ser Gly Ser Val Leu Leu Leu Gln Gly Arg Ser Asn Leu
      420                425                430
Gly Thr Gly Val Val Pro Ala Ala Leu Gly Gly Ala Gly Val Met Ala
      435                440                445
Leu Leu Cys Ile Cys Leu Cys Leu Ile Phe Phe Leu Ile Val Lys Ala
      450                455                460
Arg Arg Lys Gln Ala Ala Gly Arg Pro Glu Lys Met Asp Asp Glu Asp
      465                470                475                480
Pro Ile Met Gly Thr Ile Thr Ser Gly Ser Arg Lys Lys Pro Trp Pro
      485                490                495
Asp Ser Pro Gly Asp Gln Ala Ser Pro Pro Gly Asp Ala Pro Pro Leu
      500                505                510
Glu Glu Gln Lys Glu Leu His Tyr Ala Ser Leu Ser Phe Ser Glu Met
      515                520                525
Lys Ser Arg Glu Pro Lys Asp Gln Glu Ala Pro Ser Thr Thr Glu Tyr
      530                535                540
Ser Glu Ile Lys Thr Ser Lys *
      545                550 551

```

<210> 347
 <211> 1062
 <212> PRT
 <213> Homo sapiens

```

<400> 347
Met Leu Gly Ser Asp Asp Phe Phe Tyr Val Gly Gly Ser Pro Ser Thr
  1      5      10      15
Ala Asp Leu Pro Gly Ser Pro Val Ser Asn Asn Phe Met Gly Cys Leu
      20      25      30
Lys Glu Val Val Tyr Lys Asn Asn Asp Ile Arg Leu Glu Leu Ser Arg
      35      40      45
Leu Ala Arg Ile Ala Asp Thr Lys Met Lys Ile Tyr Gly Glu Val Val
      50      55      60

```

Phe Lys Cys Glu Asn Val Ala Thr Leu Asp Pro Ile Asn Phe Glu Thr
 65 70 75 80
 Pro Glu Ala Tyr Ile Ser Leu Pro Lys Trp Asn Thr Lys Arg Met Gly
 85 90 95
 Ser Ile Ser Phe Asp Phe Arg Thr Thr Glu Pro Asn Gly Leu Ile Leu
 100 105 110
 Phe Thr His Gly Lys Pro Gln Glu Arg Lys Asp Ala Arg Ser Gln Lys
 115 120 125
 Asn Thr Lys Val Asp Phe Phe Ala Val Glu Leu Leu Asp Gly Asn Leu
 130 135 140
 Tyr Leu Leu Leu Asp Met Gly Ser Gly Thr Ile Lys Val Lys Ala Thr
 145 150 155 160
 Gln Lys Lys Ala Asn Asp Gly Glu Trp Tyr His Val Asp Ile Gln Arg
 165 170 175
 Asp Gly Arg Ser Gly Thr Ile Ser Val Asn Ser Arg Arg Thr Pro Phe
 180 185 190
 Thr Ala Ser Gly Glu Ser Glu Ile Leu Asp Leu Glu Gly Asp Met Tyr
 195 200 205
 Leu Gly Gly Leu Pro Glu Asn Arg Ala Gly Leu Ile Leu Pro Thr Glu
 210 215 220
 Leu Trp Thr Ala Met Leu Asn Tyr Gly Tyr Val Gly Cys Ile Arg Asp
 225 230 235 240
 Leu Phe Ile Asp Gly Arg Ser Lys Asn Ile Arg Gln Leu Ala Glu Met
 245 250 255
 Gln Asn Ala Ala Gly Val Lys Ser Ser Cys Ser Arg Met Ser Ala Lys
 260 265 270
 Gln Cys Asp Ser Tyr Pro Cys Lys Asn Asn Ala Val Cys Lys Asp Gly
 275 280 285
 Trp Asn Arg Phe Ile Cys Asp Cys Thr Gly Thr Gly Tyr Trp Gly Arg
 290 295 300
 Thr Cys Glu Arg Glu Ala Ser Ile Leu Ser Tyr Asp Gly Ser Met Tyr
 305 310 315 320
 Met Lys Ile Ile Met Pro Met Val Met His Thr Glu Ala Glu Asp Val
 325 330 335
 Ser Phe Arg Phe Met Ser Gln Arg Ala Tyr Gly Leu Leu Val Ala Thr
 340 345 350
 Thr Ser Arg Asp Ser Ala Asp Thr Leu Arg Leu Glu Leu Asp Gly Gly
 355 360 365
 Arg Val Lys Leu Met Val Asn Leu Asp Cys Ile Arg Ile Asn Cys Asn
 370 375 380
 Ser Ser Lys Gly Pro Glu Thr Leu Tyr Ala Gly Gln Lys Leu Asn Asp
 385 390 395 400
 Asn Glu Trp His Thr Val Arg Val Val Arg Arg Gly Lys Ser Leu Lys
 405 410 415
 Leu Thr Val Asp Asp Val Ala Glu Gly Thr Met Val Gly Asp His
 420 425 430
 Thr Arg Leu Glu Phe His Asn Ile Glu Thr Gly Ile Met Thr Glu Lys
 435 440 445
 Arg Tyr Ile Ser Val Val Pro Ser Ser Phe Ile Gly His Leu Gln Ser
 450 455 460
 Leu Met Phe Asn Gly Leu Leu Tyr Ile Asp Leu Cys Lys Asn Gly Asp
 465 470 475 480
 Ile Asp Tyr Cys Glu Leu Lys Ala Arg Phe Gly Leu Arg Asn Ile Ile
 485 490 495
 Ala Asp Pro Val Thr Phe Lys Thr Lys Ser Ser Tyr Leu Ser Leu Ala
 500 505 510
 Thr Leu Gln Ala Tyr Thr Ser Met His Leu Phe Phe Gln Phe Lys Thr
 515 520 525
 Thr Ser Pro Asp Gly Phe Ile Leu Phe Asn Ser Gly Asp Gly Asn Asp
 530 535 540
 Phe Ile Ala Val Glu Leu Val Lys Gly Tyr Ile His Tyr Val Phe Asp
 545 550 555 560
 Leu Gly Asn Gly Pro Asn Val Ile Lys Gly Asn Ser Asp Arg Pro Leu
 565 570 575

Asn Asp Asn Gln Trp His Asn Val Val Ile Thr Arg Asp Asn Ser Asn
 580 585 590
 Thr His Ser Leu Lys Val Asp Thr Lys Val Val Thr Gln Val Ile Asn
 595 600 605
 Gly Ala Lys Asn Leu Asp Leu Lys Gly Asp Leu Tyr Met Ala Gly Leu
 610 615 620
 Ala Gln Gly Met Tyr Ser Asn Leu Pro Lys Leu Val Ala Ser Arg Asp
 625 630 635 640
 Gly Phe Gln Gly Cys Leu Ala Ser Gly Asp Leu Asn Gly Arg Leu Pro
 645 650 655
 Asp Leu Ile Asn Asp Ala Leu His Arg Ser Gly Gln Ile Glu Arg Gly
 660 665 670
 Cys Glu Gly Pro Ser Thr Thr Cys Gln Glu Asp Ser Cys Ala Asn Gln
 675 680 685
 Gly Val Cys Met Gln Gln Trp Glu Gly Phe Thr Cys Asp Cys Ser Met
 690 695 700
 Thr Ser Tyr Ser Gly Asn Gln Cys Asn Asp Pro Gly Ala Thr Tyr Ile
 705 710 715 720
 Phe Gly Lys Ser Gly Gly Leu Ile Leu Tyr Thr Trp Pro Ala Asn Asp
 725 730 735
 Arg Pro Ser Thr Arg Ser Asp Arg Leu Ala Val Gly Phe Ser Thr Thr
 740 745 750
 Val Lys Asp Gly Ile Leu Val Arg Ile Asp Ser Ala Pro Gly Leu Gly
 755 760 765
 Asp Phe Leu Gln Leu His Ile Glu Gln Gly Lys Ile Gly Val Val Phe
 770 775 780
 Asn Ile Gly Thr Val Asp Ile Ser Ile Lys Glu Glu Arg Thr Pro Val
 785 790 795 800
 Asn Asp Gly Lys Tyr His Val Val Arg Phe Thr Arg Asn Gly Gly Asn
 805 810 815
 Ala Thr Leu Gln Val Asp Asn Trp Pro Val Asn Glu His Tyr Pro Thr
 820 825 830
 Gly Arg Gln Leu Thr Ile Phe Asn Thr Gln Ala Gln Ile Ala Ile Gly
 835 840 845
 Gly Lys Asp Lys Gly Arg Leu Phe Gln Gly Gln Leu Ser Gly Leu Tyr
 850 855 860
 Tyr Asp Gly Leu Lys Val Leu Asn Met Ala Ala Glu Asn Asn Pro Asn
 865 870 875 880
 Ile Lys Ile Asn Gly Ser Val Arg Leu Val Gly Glu Val Pro Ser Ile
 885 890 895
 Leu Gly Thr Thr Gln Thr Thr Ser Met Pro Pro Glu Met Ser Thr Thr
 900 905 910
 Val Met Glu Thr Thr Thr Thr Met Ala Thr Thr Thr Thr Arg Lys Asn
 915 920 925
 Arg Ser Thr Ala Ser Ile Gln Pro Thr Ser Asp Asp Leu Val Ser Ser
 930 935 940
 Ala Glu Cys Ser Ser Asp Asp Glu Asp Phe Val Glu Cys Glu Pro Ser
 945 950 955 960
 Thr Ala Asn Pro Thr Glu Pro Gly Ile Arg Arg Val Pro Gly Ala Ser
 965 970 975
 Glu Val Ile Arg Glu Ser Ser Ser Thr Thr Gly Met Val Val Gly Ile
 980 985 990
 Val Ala Ala Ala Leu Cys Ile Leu Ile Leu Leu Tyr Ala Met Tyr
 995 1000 1005
 Lys Tyr Arg Asn Arg Asp Glu Gly Ser Tyr Gln Val Asp Glu Thr Arg
 1010 1015 1020
 Asn Tyr Ile Ser Asn Ser Ala Gln Ser Asn Gly Thr Leu Met Lys Glu
 1025 1030 1035 1040
 Lys Gln Gln Ser Ser Lys Ser Gly His Lys Lys Gln Lys Asn Lys Asp
 1045 1050 1055
 Arg Glu Tyr Tyr Val *
 10601061

<210> 348
 <211> 1092
 <212> PRT
 <213> Homo sapiens

<400> 348
 Met Leu Gly Ser Asp Asp Phe Phe Tyr Val Gly Gly Ser Pro Ser Thr
 1 5 10 15
 Ala Asp Leu Pro Gly Ser Pro Val Ser Asn Asn Phe Met Gly Cys Leu
 20 25 30
 Lys Glu Val Val Tyr Lys Asn Asn Asp Ile Arg Leu Glu Leu Ser Arg
 35 40 45
 Leu Ala Arg Ile Ala Asp Thr Lys Met Lys Ile Tyr Gly Glu Val Val
 50 55 60
 Phe Lys Cys Glu Asn Val Ala Thr Leu Asp Pro Ile Asn Phe Glu Thr
 65 70 75 80
 Pro Glu Ala Tyr Ile Ser Leu Pro Lys Trp Asn Thr Lys Arg Met Gly
 85 90 95
 Ser Ile Ser Phe Asp Phe Arg Thr Thr Glu Pro Asn Gly Leu Ile Leu
 100 105 110
 Phe Thr His Gly Lys Pro Gln Glu Arg Lys Asp Ala Arg Ser Gln Lys
 115 120 125
 Asn Thr Lys Val Asp Phe Phe Ala Val Glu Leu Leu Asp Gly Asn Leu
 130 135 140
 Tyr Leu Leu Leu Asp Met Gly Ser Gly Thr Ile Lys Val Lys Ala Thr
 145 150 155 160
 Gln Lys Lys Ala Asn Asp Gly Glu Trp Tyr His Val Asp Ile Gln Arg
 165 170 175
 Asp Gly Arg Ser Gly Thr Ile Ser Val Asn Ser Arg Arg Thr Pro Phe
 180 185 190
 Thr Ala Ser Gly Glu Ser Glu Ile Leu Asp Leu Glu Gly Asp Met Tyr
 195 200 205
 Leu Gly Gly Leu Pro Glu Asn Arg Ala Gly Leu Ile Leu Pro Thr Glu
 210 215 220
 Leu Trp Thr Ala Met Leu Asn Tyr Gly Tyr Val Gly Cys Ile Arg Asp
 225 230 235 240
 Leu Phe Ile Asp Gly Arg Ser Lys Asn Ile Arg Gln Leu Ala Glu Met
 245 250 255
 Gln Asn Ala Ala Gly Val Lys Ser Ser Cys Ser Arg Met Ser Ala Lys
 260 265 270
 Gln Cys Asp Ser Tyr Pro Cys Lys Asn Asn Ala Val Cys Lys Asp Gly
 275 280 285
 Trp Asn Arg Phe Ile Cys Asp Cys Thr Gly Thr Gly Tyr Trp Gly Arg
 290 295 300
 Thr Cys Glu Arg Glu Ala Ser Ile Leu Ser Tyr Asp Gly Ser Met Tyr
 305 310 315 320
 Met Lys Ile Ile Met Pro Met Val Met His Thr Glu Ala Glu Asp Val
 325 330 335
 Ser Phe Arg Phe Met Ser Gln Arg Ala Tyr Gly Leu Leu Val Ala Thr
 340 345 350
 Thr Ser Arg Asp Ser Ala Asp Thr Leu Arg Leu Glu Leu Asp Gly Gly
 355 360 365
 Arg Val Lys Leu Met Val Asn Leu Asp Cys Ile Arg Ile Asn Cys Asn
 370 375 380
 Ser Ser Lys Gly Pro Glu Thr Leu Tyr Ala Gly Gln Lys Leu Asn Asp
 385 390 395 400
 Asn Glu Trp His Thr Val Arg Val Val Arg Arg Gly Lys Ser Leu Lys
 405 410 415
 Leu Thr Val Asp Asp Val Ala Glu Gly Thr Met Val Gly Asp His
 420 425 430
 Thr Arg Leu Glu Phe His Asn Ile Glu Thr Gly Ile Met Thr Glu Lys
 435 440 445


```

Arg Tyr Ile Ser Val Val Pro Ser Ser Phe Ile Gly His Leu Gln Ser
  450                455                460
Leu Met Phe Asn Gly Leu Leu Tyr Ile Asp Leu Cys Lys Asn Gly Asp
465                470                475                480
Ile Asp Tyr Cys Glu Leu Lys Ala Arg Phe Gly Leu Arg Asn Ile Ile
                485                490                495
Ala Asp Pro Val Thr Phe Lys Thr Lys Ser Ser Tyr Leu Ser Leu Ala
                500                505                510
Thr Leu Gln Ala Tyr Thr Ser Met His Leu Phe Phe Gln Phe Lys Thr
                515                520                525
Thr Ser Pro Asp Gly Phe Ile Leu Phe Asn Ser Gly Asp Gly Asn Asp
                530                535                540
Phe Ile Ala Val Glu Leu Val Lys Gly Tyr Ile His Tyr Val Phe Asp
545                550                555                560
Leu Gly Asn Gly Pro Asn Val Ile Lys Gly Asn Ser Asp Arg Pro Leu
                565                570                575
Asn Asp Asn Gln Trp His Asn Val Val Ile Thr Arg Asp Asn Ser Asn
                580                585                590
Thr His Ser Leu Lys Val Asp Thr Lys Val Val Thr Gln Val Ile Asn
                595                600                605
Gly Ala Lys Asn Leu Asp Leu Lys Gly Asp Leu Tyr Met Ala Gly Leu
                610                615                620
Ala Gln Gly Met Tyr Ser Asn Leu Pro Lys Leu Val Ala Ser Arg Asp
625                630                635                640
Gly Phe Gln Gly Cys Leu Ala Ser Gly Asp Leu Asn Gly Arg Leu Pro
                645                650                655
Asp Leu Ile Asn Asp Ala Leu His Arg Ser Gly Gln Ile Glu Arg Gly
                660                665                670
Cys Glu Gly Pro Ser Thr Thr Cys Gln Glu Asp Ser Cys Ala Asn Gln
                675                680                685
Gly Val Cys Met Gln Gln Trp Glu Gly Phe Thr Cys Asp Cys Ser Met
690                695                700
Thr Ser Tyr Ser Gly Asn Gln Cys Asn Asp Pro Gly Ala Thr Tyr Ile
705                710                715                720
Phe Gly Lys Ser Gly Gly Leu Ile Leu Tyr Thr Trp Pro Ala Asn Asp
                725                730                735
Arg Pro Ser Thr Arg Ser Asp Arg Leu Ala Val Gly Phe Ser Thr Thr
                740                745                750
Val Lys Asp Gly Ile Leu Val Arg Ile Asp Ser Ala Pro Gly Leu Gly
755                760                765
Asp Phe Leu Gln Leu His Ile Glu Gln Gly Lys Ile Gly Val Val Phe
770                775                780
Asn Ile Gly Thr Val Asp Ile Ser Ile Lys Glu Glu Arg Thr Pro Val
785                790                795                800
Asn Asp Gly Lys Tyr His Val Val Arg Phe Thr Arg Asn Gly Gly Asn
                805                810                815
Ala Thr Leu Gln Val Asp Asn Trp Pro Val Asn Glu His Tyr Pro Thr
                820                825                830
Gly Asn Thr Asp Asn Glu Arg Phe Gln Met Val Lys Gln Lys Ile Pro
                835                840                845
Phe Lys Tyr Asn Arg Pro Val Glu Glu Trp Leu Gln Glu Lys Gly Arg
850                855                860
Gln Leu Thr Ile Phe Asn Thr Gln Ala Gln Ile Ala Ile Gly Gly Lys
865                870                875                880
Asp Lys Gly Arg Leu Phe Gln Gly Gln Leu Ser Gly Leu Tyr Tyr Asp
                885                890                895
Gly Leu Lys Val Leu Asn Met Ala Ala Glu Asn Asn Pro Asn Ile Lys
900                905                910
Ile Asn Gly Ser Val Arg Leu Val Gly Glu Val Pro Ser Ile Leu Gly
915                920                925
Thr Thr Gln Thr Thr Ser Met Pro Pro Glu Met Ser Thr Thr Val Met
930                935                940
Glu Thr Thr Thr Thr Met Ala Thr Thr Thr Thr Arg Lys Asn Arg Ser
945                950                955                960

```

Thr Ala Ser Ile Gln Pro Thr Ser Asp Asp Leu Val Ser Ser Ala Glu
 965 970 975
 Cys Ser Ser Asp Asp Glu Asp Phe Val Glu Cys Glu Pro Ser Thr Ala
 980 985 990
 Asn Pro Thr Glu Pro Gly Ile Arg Arg Val Pro Gly Ala Ser Glu Val
 995 1000 1005
 Ile Arg Glu Ser Ser Ser Thr Thr Gly Met Val Val Gly Ile Val Ala
 1010 1015 1020
 Ala Ala Ala Leu Cys Ile Leu Ile Leu Leu Tyr Ala Met Tyr Lys Tyr
 1025 1030 1035 1040
 Arg Asn Arg Asp Glu Gly Ser Tyr Gln Val Asp Glu Thr Arg Asn Tyr
 1045 1050 1055
 Ile Ser Asn Ser Ala Gln Ser Asn Gly Thr Leu Met Lys Glu Lys Gln
 1060 1065 1070
 Gln Ser Ser Lys Ser Gly His Lys Lys Gln Lys Asn Lys Asp Arg Glu
 1075 1080 1085
 Tyr Tyr Val *
 10901091

<210> 349
 <211> 47
 <212> PRT
 <213> Homo sapiens

<400> 349
 Met Gly Ser Leu Met Pro Leu Arg Pro Leu Ala Leu His Thr Ala Leu
 1 5 10 15
 Gly Ala Ala Leu Asn Phe Ser Leu Pro Cys Glu Trp Ser Thr Leu Pro
 20 25 30
 Ser Ala Ser Glu Ala Gly Arg Leu Trp Gly Pro Pro Ser Phe Gln
 35 40 45 47

<210> 350
 <211> 459
 <212> PRT
 <213> Homo sapiens

<400> 350
 Met Ala Trp Ala Ser Arg Leu Gly Leu Leu Leu Ala Leu Leu Leu Pro
 1 5 10 15
 Val Val Gly Ala Ser Thr Pro Gly Thr Val Val Arg Leu Asn Lys Ala
 20 25 30
 Ala Leu Ser Tyr Val Ser Glu Ile Gly Lys Ala Pro Leu Gln Arg Ala
 35 40 45
 Leu Gln Val Thr Val Pro His Phe Leu Asp Trp Ser Gly Glu Ala Leu
 50 55 60
 Gln Pro Thr Arg Ile Arg Ile Leu Asn Val His Val Pro Arg Leu His
 65 70 75 80
 Leu Lys Phe Ile Ala Gly Phe Gly Val Arg Leu Leu Ala Ala Ala Asn
 85 90 95
 Phe Thr Phe Lys Val Phe Arg Ala Pro Glu Pro Leu Glu Leu Thr Leu
 100 105 110
 Pro Val Glu Leu Leu Ala Asp Thr Arg Val Thr Gln Ser Ser Ile Arg
 115 120 125
 Thr Pro Val Val Ser Ile Ser Ala Cys Ser Leu Phe Ser Gly His Ala
 130 135 140
 Asn Glu Phe Asp Gly Ser Asn Ser Thr Ser His Ala Leu Leu Val Leu
 145 150 155 160

Val Gln Lys His Ile Lys Ala Val Leu Ser Asn Lys Leu Cys Leu Ser
 165 170 175
 Ile Ser Asn Leu Val Gln Gly Val Asn Val His Leu Gly Thr Leu Ile
 180 185 190
 Gly Leu Asn Pro Val Gly Pro Glu Ser Gln Ile Arg Tyr Ser Met Val
 195 200 205
 Ser Val Pro Thr Val Thr Ser Asp Tyr Ile Ser Leu Glu Val Asn Ala
 210 215 220
 Val Leu Phe Leu Leu Gly Lys Pro Ile Ile Leu Pro Thr Asp Ala Thr
 225 230 235 240
 Pro Phe Val Leu Pro Arg His Val Gly Thr Glu Gly Ser Met Ala Thr
 245 250 255
 Val Gly Leu Ser Gln Gln Leu Phe Asp Ser Ala Leu Leu Leu Leu Gln
 260 265 270
 Lys Ala Gly Ala Leu Asn Leu Asp Ile Thr Gly Gln Leu Arg Ser Asp
 275 280 285
 Asp Asn Leu Leu Asn Thr Ser Ala Leu Gly Arg Leu Ile Pro Glu Val
 290 295 300
 Ala Arg Gln Phe Pro Glu Pro Met Pro Val Val Leu Lys Val Arg Leu
 305 310 315 320
 Gly Ala Thr Pro Val Ala Met Leu His Thr Asn Asn Ala Thr Leu Arg
 325 330 335
 Leu Gln Pro Phe Val Glu Val Leu Ala Thr Ala Ser Asn Ser Ala Phe
 340 345 350
 Gln Ser Leu Phe Ser Leu Asp Val Val Val Asn Leu Arg Leu Gln Leu
 355 360 365
 Ser Val Ser Lys Val Lys Leu Gln Gly Thr Thr Ser Val Leu Gly Asp
 370 375 380
 Val Gln Leu Thr Val Ala Ser Ser Asn Val Gly Phe Ile Asp Thr Asp
 385 390 395 400
 Gln Val Arg Thr Leu Met Gly Thr Val Phe Glu Lys Pro Leu Leu Asp
 405 410 415
 His Leu Asn Ala Leu Leu Ala Met Gly Ile Ala Leu Pro Gly Val Val
 420 425 430
 Asn Leu His Tyr Val Ala Pro Glu Ile Phe Val Tyr Glu Gly Tyr Val
 435 440 445
 Val Ile Ser Ser Gly Leu Phe Tyr Gln Ser *
 450 455 458

<210> 351

<211> 67

<212> PRT

<213> Homo sapiens

<400> 351

Met Lys Leu Val Leu Leu Arg Lys Thr Ser Leu Ser Val Phe Thr Thr
 1 5 10 15
 Leu Phe Ser Val Ser Ser Ser Gln Tyr Pro Val Leu Ser Thr Ser Ile
 20 25 30
 Cys Asn Thr Pro Val Phe Ser Thr Leu Phe Leu Val Ser Cys Ser Val
 35 40 45
 Asn Pro Leu Pro Ser Thr Val Phe Leu Val Leu Leu Tyr Ser Val Ala
 50 55 60
 Cys Leu *
 65 66

<210> 352

<211> 174

<212> PRT

<213> Homo sapiens

<400> 352
 Met Ala Ser Arg Lys Thr Lys Lys Lys Glu Gly Gly Ala Leu Arg Ala
 1 5 10 15
 Gln Arg Ala Ser Asn Val Phe Ser Asn Phe Glu Gln Thr Gln Ile
 20 25 30
 Gln Glu Phe Lys Glu Ala Phe Thr Leu Met Asp Gln Asn Arg Asp Gly
 35 40 45
 Phe Ile Asp Lys Glu Asp Leu Lys Asp Thr Tyr Ala Ser Leu Gly Lys
 50 55 60
 Thr Asn Val Lys Asp Asp Glu Leu Asp Ala Met Leu Lys Glu Ala Ser
 65 70 75 80
 Gly Pro Ile Asn Phe Thr Met Phe Leu Asn Leu Phe Gly Glu Lys Leu
 85 90 95
 Ser Gly Thr Asp Ala Glu Glu Thr Ile Leu Asn Ala Phe Lys Met Leu
 100 105 110
 Asp Pro Asp Gly Lys Gly Lys Ile Asn Lys Glu Tyr Ile Lys Arg Leu
 115 120 125
 Leu Met Ser Gln Ala Asp Lys Met Thr Ala Glu Glu Val Asp Gln Met
 130 135 140
 Phe Gln Phe Ala Ser Ile Asp Val Ala Gly Asn Leu Asp Tyr Lys Ala
 145 150 155 160
 Leu Ser Tyr Val Ile Thr His Gly Glu Glu Lys Glu Glu *
 165 170 173

<210> 353

<211> 64

<212> PRT

<213> Homo sapiens

<400> 353
 Met Leu Leu Ala Lys Arg Tyr Ala Lys Tyr Phe Ile Tyr Phe Ile Phe
 1 5 10 15
 Phe Asn Pro Val Leu Ile Pro Ile Leu Gln Arg Arg Ile Leu Arg Leu
 20 25 30
 Gly Glu Ile His Ile Ala Gly Gln Cys Arg Ala Gly Ser Leu Gln Ser
 35 40 45
 Leu Pro Leu Pro Ala Asn Leu His Ser Ile Leu Asp Ile Leu Ala *
 50 55 60 63

<210> 354

<211> 321

<212> PRT

<213> Homo sapiens

<400> 354
 Met Ala Ala Ala Thr Gly Ala Val Ala Ala Ser Ala Ala Ser Gly Gln
 1 5 10 15
 Ala Glu Gly Lys Lys Ile Thr Asp Leu Arg Val Ile Asp Leu Lys Ser
 20 25 30
 Glu Leu Lys Arg Arg Asn Leu Asp Ile Thr Gly Val Lys Thr Val Leu
 35 40 45
 Ile Ser Arg Leu Lys Gln Ala Ile Glu Glu Glu Gly Gly Asp Pro Asp
 50 55 60
 Asn Ile Glu Leu Thr Val Ser Thr Asp Thr Pro Asn Lys Lys Pro Thr
 65 70 75 80

PCT/US01/02623

```
<210> 355
<211> 59
<212> PRT
<213> Homo sapiens
```

```
<210> 356
<211> 72
<212> PRT
<213> Homo sapiens
```

432

Arg Ala Ser Arg Glu Arg Pro Ser Glu Asp Asn Leu Ser Pro Ala Val
 35 40 45
 Lys Glu Glu Ser Gly Phe Val Ser Glu His Leu Ala Ala Leu His
 50 55 60
 Arg Lys Leu Arg Gly Cys His *
 65 70 71

<210> 357
 <211> 311
 <212> PRT
 <213> Homo sapiens

<400> 357
 Met Leu Leu Leu Leu Leu Leu Gly Pro Ala Gly Ser Gly Leu Gly
 1 5 10 15
 Ala Val Val Ser Gln His Pro Ser Arg Val Ile Cys Lys Ser Gly Thr
 20 25 30
 Ser Val Lys Ile Glu Cys Arg Ser Leu Asp Phe Gln Ala Thr Thr Met
 35 40 45
 Phe Trp Tyr Arg Gln Phe Pro Lys Gln Ser Leu Met Leu Met Ala Thr
 50 55 60
 Ser Asn Glu Gly Ser Lys Ala Thr Tyr Glu Gln Gly Val Glu Lys Asp
 65 70 75 80
 Lys Phe Leu Ile Asn His Ala Ser Leu Thr Leu Ser Thr Leu Thr Val
 85 90 95
 Thr Ser Ala His Pro Glu Asp Ser Ser Phe Tyr Ile Cys Ser Ala Ser
 100 105 110
 Gly Met Arg Arg Thr Asp Thr Gln Tyr Phe Gly Pro Gly Thr Arg Leu
 115 120 125
 Thr Val Leu Glu Asp Leu Lys Asn Val Phe Pro Pro Glu Val Ala Val
 130 135 140
 Phe Glu Pro Ser Glu Ala Glu Ile Ser His Thr Gln Lys Ala Thr Leu
 145 150 155 160
 Val Cys Leu Ala Thr Gly Phe Tyr Pro Asp His Val Glu Leu Ser Trp
 165 170 175
 Trp Val Asn Gly Lys Glu Val His Ser Gly Val Ser Thr Asp Pro Gln
 180 185 190
 Pro Leu Lys Glu Gln Pro Ala Leu Asn Asp Ser Arg Tyr Cys Leu Ser
 195 200 205
 Ser Arg Leu Arg Val Ser Ala Thr Phe Trp Gln Asn Pro Arg Asn His
 210 215 220
 Phe Arg Cys Gln Val Gln Phe Tyr Gly Leu Ser Glu Asn Asp Glu Trp
 225 230 235 240
 Thr Gln Asp Arg Ala Lys Pro Val Thr Gln Ile Val Ser Ala Glu Ala
 245 250 255
 Trp Gly Arg Ala Asp Cys Gly Phe Thr Ser Glu Ser Tyr Gln Gln Gly
 260 265 270
 Val Leu Ser Ala Thr Ile Leu Tyr Glu Ile Leu Leu Gly Lys Ala Thr
 275 280 285
 Leu Tyr Ala Val Leu Val Ser Ala Leu Val Leu Met Ala Met Val Lys
 290 295 300
 Arg Lys Asp Ser Arg Gly *
 305 310

<210> 358
 <211> 53
 <212> PRT
 <213> Homo sapiens

<400> 358
 Met Ser Val Gly Leu His Leu Gly Phe Leu Ala Trp Phe Leu Pro Phe
 1 5 10 15
 Leu Ile Pro Thr Ser Pro Leu Pro Leu Leu Phe Gln Leu Gly Ala Leu
 20 25 30
 Pro Asn Glu Ser Leu Ala Leu Tyr Ala Trp Leu Arg Asp Cys Phe Trp
 35 40 45
 Glu Asn Ile Thr *
 50 52

<210> 359
 <211> 67
 <212> PRT
 <213> Homo sapiens

<400> 359
 Met Ser Ser Pro Cys Phe Gln Cys Phe His Leu Cys Cys Thr Ile Lys
 1 5 10 15
 Val Trp Pro Leu Cys His His Leu Gln Lys Ala Phe Pro Asp Phe Ser
 20 25 30
 Ile His Val Phe Ser Glu Arg Asp Leu Ser Ser Phe Cys Glu Val Gln
 35 40 45
 Leu Leu Lys Ile Cys Leu Gln Lys Tyr Phe Leu Gly Ser Leu Met His
 50 55 60
 Cys Ser *
 65 66

<210> 360
 <211> 72
 <212> PRT
 <213> Homo sapiens

<400> 360
 Met Glu Lys Tyr Phe His Thr Val Met Ile Lys Leu Cys His Gln Leu
 1 5 10 15
 Tyr Asn Val Tyr Val Cys Phe Phe His Leu Ile Val Leu Gly Asp Ile
 20 25 30
 Ala Ile Asp Tyr Ile Ile Val Pro Asn Ile Ser Tyr Leu Ser Ile Ser
 35 40 45
 Ile Pro Phe Val Val Thr Asn Ile Arg Gly Arg Asp Ile Phe His Pro
 50 55 60
 Cys Asn Val Ala Leu Val Met *
 65 70 71

<210> 361
 <211> 50
 <212> PRT
 <213> Homo sapiens

<400> 361
 Met Phe Val Met Phe Tyr Glu Asn Lys Arg Arg Glu Tyr Leu Gln Asp
 1 5 10 15
 Met Leu Leu Ser Tyr Arg Leu Leu Val Ala Ile Leu Val Leu Leu Lys
 20 25 30

Lys Leu Thr Glu Leu Asn Thr Ile Thr Leu Ile Cys Lys Ser Ile Ile
 35 40 45
 Phe *
 49

<210> 362
 <211> 52
 <212> PRT
 <213> Homo sapiens

<400> 362
 Met Asn Ile Val Phe Val Ile Leu Leu Phe Lys Asp Met Gln Val Leu
 1 5 10 15
 Glu Val Phe Val Leu Leu Asn Val Leu Thr Thr Leu Thr Ile Ile Ala
 20 25 30
 Ala Gly Ile Leu Cys Thr Ser Phe Cys Cys Lys Pro Phe Ile Tyr Ile
 35 40 45
 Asn Pro Leu *
 50 51

<210> 363
 <211> 61
 <212> PRT
 <213> Homo sapiens

<400> 363
 Met Ile Arg Phe Ala Leu Pro Trp Phe Ser Gln Ile Trp Leu Ser Lys
 1 5 10 15
 Gln Thr Trp Thr Arg Leu Thr His Leu Ala Phe Leu Leu Gln Glu Cys
 20 25 30
 Asn Ser Met Phe Tyr Pro Lys Val Ser Arg Thr Thr Val Phe Gly Cys
 35 40 45
 Leu Phe Asn Pro Leu Ser Ser Arg Val Cys Phe Glu *
 50 55 60

<210> 364
 <211> 89
 <212> PRT
 <213> Homo sapiens

<400> 364
 Met Thr Asn Phe Phe His Leu Leu Leu Pro Leu Leu Pro Ser Leu Phe
 1 5 10 15
 Ser Pro Ser Ser Lys Thr His Ser Phe Asn Ile His Lys Ile Ile Ile
 20 25 30
 Ile Ile Leu Phe Phe Asn Ser Ile Phe Leu Tyr Pro Arg Asp Tyr Leu
 35 40 45
 Lys Ile Arg Asn Trp Leu Gln Ser Asn Thr Leu Glu Arg Glu Ile Glu
 50 55 60
 Trp Ile Thr Ser Ile Arg Cys Leu Cys Asn Ser Gly Thr Thr Phe Ile
 65 70 75 80
 Phe Pro Leu Thr Thr Lys Ser Thr *
 85 88

<210> 365
 <211> 433
 <212> PRT
 <213> Homo sapiens

<400> 365
 Met Leu Glu Asn Tyr Gly Asn Leu Val Ser Val Gly Cys Gln Leu Ser
 1 5 10 15
 Lys Pro Gly Val Ile Ser Gln Leu Glu Lys Gly Glu Glu Pro Trp Leu
 20 25 30
 Met Glu Arg Asp Ile Ser Gly Val Pro Ser Ser Asp Leu Lys Ser Lys
 35 40 45
 Thr Lys Thr Lys Glu Ser Ala Leu Gln Asn Asp Ile Ser Trp Glu Glu
 50 55 60
 Leu His Cys Gly Leu Met Met Glu Arg Phe Thr Lys Gly Ser Ser Met
 65 70 75 80
 Tyr Ser Thr Leu Gly Arg Ile Ser Lys Cys Asn Lys Leu Glu Ser Gln
 85 90 95
 Gln Glu Asn Gln Arg Met Gly Lys Gly Gln Ile Pro Leu Met Cys Lys
 100 105 110
 Lys Thr Phe Thr Gln Glu Arg Gly Gln Glu Ser Asn Arg Phe Glu Lys
 115 120 125
 Arg Ile Asn Val Lys Ser Glu Val Met Pro Gly Pro Ile Gly Leu Pro
 130 135 140
 Arg Lys Arg Asp Arg Lys Tyr Asp Thr Pro Gly Lys Arg Ser Arg Tyr
 145 150 155 160
 Asn Ile Asp Leu Val Asn His Ser Arg Ser Tyr Thr Lys Met Lys Thr
 165 170 175
 Phe Glu Cys Asn Ile Cys Glu Lys Ile Phe Lys Gln Leu Ile His Leu
 180 185 190
 Thr Glu His Met Arg Ile His Thr Gly Glu Lys Pro Phe Arg Cys Lys
 195 200 205
 Glu Cys Gly Lys Ala Phe Ser Gln Ser Ser Ser Leu Ile Pro His Gln
 210 215 220
 Arg Ile His Thr Gly Glu Lys Pro Tyr Glu Cys Lys Glu Cys Gly Lys
 225 230 235 240
 Thr Phe Arg His Pro Ser Ser Leu Thr Gln His Val Arg Ile His Thr
 245 250 255
 Gly Glu Lys Pro Tyr Glu Cys Arg Val Cys Glu Lys Ala Phe Ser Gln
 260 265 270
 Ser Ile Gly Leu Ile Gln His Leu Arg Thr His Val Arg Glu Lys Pro
 275 280 285
 Phe Thr Cys Lys Asp Cys Gly Lys Ala Phe Phe Gln Ile Arg His Leu
 290 295 300
 Arg Gln His Glu Ile Ile His Thr Gly Val Lys Pro Tyr Ile Cys Asn
 305 310 315 320
 Val Cys Ser Lys Thr Phe Ser His Ser Thr Tyr Leu Thr Gln His Gln
 325 330 335
 Arg Thr His Thr Gly Glu Arg Pro Tyr Lys Cys Lys Glu Cys Gly Lys
 340 345 350
 Ala Phe Ser Gln Arg Ile His Leu Ser Ile His Gln Arg Val His Thr
 355 360 365
 Gly Val Lys Pro Tyr Glu Cys Ser His Cys Gly Lys Ala Phe Arg His
 370 375 380
 Asp Ser Ser Phe Ala Lys His Gln Arg Ile His Thr Gly Glu Lys Pro
 385 390 395 400
 Tyr Asp Cys Asn Glu Cys Gly Lys Ala Phe Ser Cys Ser Ser Ser Leu
 405 410 415
 Ile Arg His Cys Lys Thr His Leu Arg Asn Thr Phe Ser Asn Val Val
 420 425 430 432

*

<210> 366
 <211> 57
 <212> PRT
 <213> Homo sapiens

<400> 366
 Met Pro Cys Ser Val Pro Glu Thr Leu Phe Ser Leu Leu Trp Leu Ala
 1 5 10 15
 Pro Ser His His Ser Gly Phe Ser Ser Asn Glu Ala Ser Leu Arg Thr
 20 25 30
 Asp Leu Leu Phe Ala Thr Ala Ile Leu Tyr Ser Leu Trp His Pro Pro
 35 40 45
 Tyr Tyr Phe Leu Tyr Asn Thr Ser *
 50 55 56

<210> 367
 <211> 56
 <212> PRT
 <213> Homo sapiens

<400> 367
 Met Leu Phe Thr Ser Phe Val Tyr Gly Leu Ile Phe Ile Leu Phe Asp
 1 5 10 15
 Phe Tyr Phe Leu Ser Phe Val Glu Arg Asp Val Lys Ile Phe Asn Cys
 20 25 30
 Asn Gly Glu Ile Val Leu Phe Pro Phe Asn Ser Val His Phe Cys Leu
 35 40 45
 Ile Cys Leu Tyr Ile His Ile *
 50 55

<210> 368
 <211> 49
 <212> PRT
 <213> Homo sapiens

<400> 368
 Met Ile Leu Asn Leu Ser Ser Leu Thr Leu Val Phe Ala Trp Asn Tyr
 1 5 10 15
 Pro Leu His Leu Met Ile Ser Leu Asn Val Ser Cys Ser Cys Tyr Ser
 20 25 30
 Asp Asp Ile Ser Gly Ile Tyr Arg Ser Val Leu Arg Gln Lys Leu Gly
 35 40 45 48
 *

<210> 369
 <211> 72
 <212> PRT
 <213> Homo sapiens

<400> 369

```

Met Cys Leu Ile Leu Val Ile Trp Lys Ile His Tyr Ala Glu Leu Ile
 1              5              10              15
Met Leu Asn Lys Arg Val Val Asn Lys Cys Arg Ser Cys Leu Ile Gln
              20              25              30
Lys Cys Leu Ser Thr Cys His Ser Thr Val Ile Val Leu Tyr Gln Cys
              35              40              45
Arg Glu Glu Glu Ala Val Met Leu Ile Lys Leu Asn Phe Lys Met Lys
              50              55              60
Ile Gln Arg Thr Ile Cys Ile *
65              70 71

```

```

<210> 370
<211> 83
<212> PRT
<213> Homo sapiens

```

```

<400> 370
Met Asn Asn Met Asn Leu Lys Arg Leu Leu Leu Phe Leu Ala Lys Met
 1              5              10              15
Phe Ser Ala Ile Phe Ser Leu Pro Thr His Pro Ser His Phe Pro Ile
              20              25              30
Ser Ile Tyr Asp Asn Ile Gly His Trp Pro Gln Ser Pro Lys Val Arg
              35              40              45
Arg Lys Glu Gly Asn Glu Tyr Leu Leu Asn Pro Asn Met Cys Gln Thr
              50              55              60
Leu Asp Leu Thr Leu Leu Gly Ile Gly Asp Tyr Leu Thr Ser Ile Thr
65              70              75              80
Ser Pro *
82

```

```

<210> 371
<211> 91
<212> PRT
<213> Homo sapiens

```

```

<400> 371
Met Ala Pro Leu Pro Ser Leu Thr Leu Arg Pro Trp Cys Val Leu Met
 1              5              10              15
Leu Leu Asp Leu Trp Ala Ala Phe Gly Thr Ile Thr Pro Ser Leu Lys
              20              25              30
His Phe His His Leu Pro Ser Gly Thr Gln His Ser Leu Val Phe Val
              35              40              45
Leu Ser Leu Thr Leu His Ser Gln Leu Ser Leu Leu Met Gly Thr Ser
              50              55              60
Ala Val Cys Leu Ser Ala Cys Phe Ser Ser Leu Ser Thr Phe Pro Gly
65              70              75              80
Trp Leu Leu Ile Ile Cys Thr Leu Met Ile *
              85              90

```

```

<210> 372
<211> 45
<212> PRT
<213> Homo sapiens

```

```

<400> 372

```

Met Gln Ser Arg Leu Val Phe Ser Ser Gln Ala Val Ala Phe Ser Ile
 1 5 10 15
 His Lys Asn Lys Val Glu Arg Arg Pro Gly Gln Gln Ala Gln Ala Leu
 20 25 30
 Gly Leu Leu Lys Ile Ile Leu Phe Ser Val Phe Pro *
 35 40 44

<210> 373
 <211> 59
 <212> PRT
 <213> Homo sapiens

<400> 373
 Met Leu Ser Leu Val Lys Leu Leu Leu Leu Cys Ile Ile His Asp His
 1 5 10 15
 Ser Ile Asn Phe Cys Ile Ala Ile Gln Val Gly Leu Leu Pro Ser Ala
 20 25 30
 Tyr Arg Val Pro Gly Ile Val Leu Ser Leu Glu Asn Thr Ala Leu Ile
 35 40 45
 Arg Gln Thr Pro Cys Ser Asn Arg Ala Asn *
 50 55 58

<210> 374
 <211> 188
 <212> PRT
 <213> Homo sapiens

<400> 374
 Met Arg Pro Leu Ala Gly Ala Pro Val Pro Lys Arg Gln Lys Cys Asp
 1 5 10 15
 His Trp Thr Pro Cys Pro Ser Asp Thr Tyr Ala Tyr Arg Leu Leu Ser
 20 25 30
 Gly Gly Gly Arg Ser Lys Tyr Ala Lys Ile Cys Phe Glu Asp Asn Leu
 35 40 45
 Leu Met Gly Glu Gln Leu Gly Asn Val Ala Arg Gly Ile Asn Ile Ala
 50 55 60
 Ile Val Asn Tyr Val Thr Gly Asn Val Thr Ala Thr Arg Cys Phe Asp
 65 70 75 80
 Met Tyr Glu Gly Asp Asn Ser Gly Pro Met Thr Lys Phe Ile Gln Ser
 85 90 95
 Ala Ala Pro Lys Ser Leu Leu Phe Met Val Thr Tyr Asp Asp Gly Ser
 100 105 110
 Thr Arg Leu Asn Asn Asp Ala Lys Asn Ala Ile Glu Ala Leu Gly Ser
 115 120 125
 Lys Glu Ile Arg Asn Met Lys Phe Arg Ser Ser Trp Val Phe Ile Ala
 130 135 140
 Ala Lys Gly Leu Glu Leu Pro Ser Glu Ile Gln Arg Glu Lys Ile Asn
 145 150 155 160
 His Ser Asp Ala Lys Asn Asn Arg Tyr Ser Gly Trp Pro Ala Glu Ile
 165 170 175
 Gln Ile Glu Gly Cys Ile Pro Lys Glu Arg Ser *
 180 185 187

<210> 375
 <211> 424
 <212> PRT

<213> Homo sapiens

<400> 375

```

Met Glu Asp Lys Arg Ser Leu Ser Met Ala Arg Cys Glu Glu Arg Asn
 1          5          10          15
Ser Arg Gly Gln Asp His Gly Leu Glu Arg Val Pro Phe Pro Pro Gln
          20          25          30
Leu Gln Ser Glu Thr Tyr Leu His Pro Ala Asp Pro Ser Pro Ala Trp
          35          40          45
Asp Asp Pro Gly Ser Thr Gly Ser Pro Asn Leu Arg Leu Leu Thr Glu
          50          55          60
Glu Ile Ala Phe Gln Pro Leu Ala Glu Glu Ala Ser Phe Arg Arg Pro
          65          70          75          80
His Pro Asp Gly Asp Val Pro Pro Gln Gly Glu Asp Asn Leu Leu Ser
          85          90          95
Leu Pro Phe Pro Gln Lys Leu Trp Arg Leu Val Ser Ser Asn Gln Phe
          100          105          110
Ser Ser Ile Trp Trp Asp Asp Ser Gly Ala Cys Arg Val Ile Asn Gln
          115          120          125
Lys Leu Phe Glu Lys Glu Ile Leu Lys Arg Asp Val Ala His Lys Val
          130          135          140
Phe Ala Thr Thr Ser Ile Lys Ser Phe Phe Arg Gln Leu Asn Leu Tyr
          145          150          155          160
Gly Phe Arg Lys Arg Arg Gln Cys Thr Phe Arg Thr Phe Thr Arg Ile
          165          170          175
Phe Ser Ala Lys Arg Leu Val Ser Ile Leu Asn Lys Leu Glu Phe Tyr
          180          185          190
Cys His Pro Tyr Phe Gln Arg Asp Ser Pro His Leu Leu Val Arg Met
          195          200          205
Lys Arg Arg Val Gly Val Lys Ser Ala Pro Arg His Gln Glu Glu Asp
          210          215          220
Lys Pro Glu Ala Ala Gly Ser Cys Leu Ala Pro Ala Asp Thr Glu Gln
          225          230          235          240
Gln Asp His Thr Ser Pro Asn Glu Asn Asp Gln Val Thr Pro Gln His
          245          250          255
Arg Glu Pro Ala Gly Pro Asn Thr Gln Ile Arg Ser Gly Ser Ala Pro
          260          265          270
Pro Ala Thr Pro Val Met Val Pro Asp Ser Ala Val Ala Ser Asp Asn
          275          280          285
Ser Pro Val Thr Gln Pro Ala Gly Glu Trp Ser Glu Gly Ser Gln Ala
          290          295          300
His Val Thr Pro Val Ala Ala Val Pro Gly Pro Ala Ala Leu Pro Phe
          305          310          315          320
Leu Tyr Val Pro Gly Ser Pro Thr Gln Met Asn Ser Tyr Gly Pro Val
          325          330          335
Val Ala Leu Pro Thr Ala Ser Arg Ser Thr Leu Ala Met Asp Thr Thr
          340          345          350
Gly Leu Pro Ala Pro Gly Met Leu Pro Phe Cys His Leu Trp Val Pro
          355          360          365
Val Thr Leu Val Ala Ala Gly Ala Ala Gln Pro Ala Ala Ser Met Val
          370          375          380
Met Phe Pro His Leu Pro Ala Leu His His His Cys Pro His Ser His
          385          390          395          400
Arg Thr Ser Gln Tyr Met Pro Ala Ser Asp Gly Pro Gln Ala Tyr Pro
          405          410          415
Asp Tyr Ala Asp Gln Ser Thr *
          420          423

```

<210> 376

<211> 145

<212> PRT

<213> Homo sapiens

<400> 376

```

Met Pro Gly Val Gly Leu Leu Val Ser His Phe Ser Thr Leu Val Ser
 1              5              10              15
Arg Gln Arg Cys Pro Asn Tyr Ala Asp Pro Gln Asn Leu Thr Asp Val
              20              25              30
Ser Ile Phe Leu Leu Leu Glu Val Ser Gly Asp Pro Glu Leu Gln Pro
              35              40              45
Val Leu Ala Gly Leu Phe Leu Ser Met Cys Leu Val Thr Val Leu Gly
              50              55              60
Asn Leu Leu Ile Ile Leu Ala Ile Ser Pro Asp Ser His Leu His Thr
65              70              75              80
Pro Met Tyr Phe Phe Leu Ser Asn Leu Ser Leu Pro Asp Ile Gly Phe
              85              90              95
Thr Ser Thr Thr Val Pro Lys Met Ile Val Asp Ile Gln Ser His Ser
              100             105             110
Arg Val Ile Ser Tyr Ala Gly Cys Leu Thr Gln Met Ser Leu Phe Ala
              115             120             125
Ile Phe Gly Gly Met Glu Glu Arg His Ala Pro Glu Cys Asp Gly Leu
130              135              140              144
*
```

<210> 377

<211> 407

<212> PRT

<213> Homo sapiens

<400> 377

```

Met Leu Leu Leu Leu Leu Leu Leu Pro Leu Leu Trp Gly Thr Lys Gly
 1              5              10              15
Met Glu Gly Asp Arg Gln Tyr Gly Asp Gly Tyr Leu Leu Gln Val Gln
              20              25              30
Glu Leu Val Thr Val Gln Glu Gly Leu Cys Val His Val Pro Cys Ser
              35              40              45
Phe Ser Tyr Pro Gln Asp Gly Trp Thr Asp Ser Asp Pro Val His Gly
              50              55              60
Tyr Trp Phe Arg Ala Gly Asp Arg Pro Tyr Gln Asp Ala Pro Val Ala
65              70              75              80
Thr Asn Asn Pro Asp Arg Glu Val Gln Ala Glu Thr Gln Gly Arg Phe
              85              90              95
Gln Leu Leu Gly Asp Ile Trp Ser Asn Asp Cys Ser Leu Ser Ile Arg
              100             105             110
Asp Ala Arg Lys Arg Asp Lys Gly Ser Tyr Phe Phe Arg Leu Glu Arg
              115             120             125
Gly Ser Met Lys Trp Ser Tyr Lys Ser Gln Leu Asn Tyr Lys Thr Lys
130              135              140
Gln Leu Ser Val Phe Val Thr Asp Pro Pro Trp Asn Leu Thr Met Thr
145              150             155             160
Val Phe Gln Gly Asp Ala Thr Ala Ser Thr Ala Leu Gly Asn Gly Ser
              165             170             175
Ser Leu Ser Val Leu Glu Gly Gln Ser Leu Arg Leu Val Cys Ala Val
              180             185             190
Asn Ser Asn Pro Pro Ala Arg Leu Ser Trp Thr Arg Gly Ser Leu Thr
              195             200             205
Leu Cys Pro Ser Arg Ser Ser Asn Pro Gly Leu Leu Glu Leu Pro Arg
210              215             220
Val His Val Arg Asp Glu Gly Glu Phe Thr Cys Arg Ala Gln Asn Ala
225              230             235             240
```

PCT/US01/02623

```
<210> 378
<211> 73
<212> PRT
<213> Homo sapiens
```

```
<210> 379
<211> 74
<212> PRT
<213> Homo sapiens
```

442

<210> 380
 <211> 93
 <212> PRT
 <213> Homo sapiens

<400> 380
 Met His Cys Arg Gln Leu Lys Glu Val Leu Gln Leu Pro Leu Thr Cys
 1 5 10 15
 Ser Ser Cys Cys Val Cys Thr Met Thr Val Ala Phe Pro Ser Val Gln
 20 25 30
 Gln Val Trp Met Glu Thr Val Leu Thr Leu Gly Gly Leu Asp Ala Ala
 35 40 45
 Gln Asp Glu Ile Gln Ala Val Arg Leu Ile Leu Leu Pro Glu Ser Ser
 50 55 60
 Pro Gln Gly Pro His Gly Asn Leu Ala Pro Cys Ser Ala Lys Pro Phe
 65 70 75 80
 Phe Leu Pro Gln Val Met Pro Leu Gly Thr Ala Pro *
 85 90 92

<210> 381
 <211> 267
 <212> PRT
 <213> Homo sapiens

<400> 381
 Met Val Cys Leu Arg Leu Pro Gly Gly Ser Cys Met Ala Val Leu Thr
 1 5 10 15
 Val Thr Leu Met Val Leu Ser Ser Pro Leu Ala Leu Ala Gly Asp Thr
 20 25 30
 Arg Pro Arg Phe Leu Glu Tyr Ser Thr Ser Glu Cys His Phe Phe Asn
 35 40 45
 Gly Thr Glu Arg Val Arg Phe Leu Asp Arg Tyr Phe Tyr Asn Gln Glu
 50 55 60
 Glu Tyr Val Arg Phe Asp Ser Asp Val Gly Glu Phe Arg Ala Val Thr
 65 70 75 80
 Glu Leu Gly Arg Pro Asp Ala Glu Tyr Trp Asn Ser Gln Lys Asp Leu
 85 90 95
 Leu Glu Gln Lys Arg Gly Arg Val Asp Asn Tyr Cys Arg His Asn Tyr
 100 105 110
 Gly Val Val Glu Ser Phe Thr Val Gln Arg Arg Val His Pro Lys Val
 115 120 125
 Thr Val Tyr Pro Ser Lys Thr Gln Pro Leu Gln His His Asn Leu Leu
 130 135 140
 Val Cys Ser Val Ser Gly Phe Tyr Pro Gly Ser Ile Glu Val Arg Trp
 145 150 155 160
 Phe Arg Asn Gly Gln Glu Glu Lys Thr Gly Val Val Ser Thr Gly Leu
 165 170 175
 Ile His Asn Gly Asp Trp Thr Phe Gln Thr Leu Val Met Leu Glu Thr
 180 185 190
 Val Pro Arg Ser Gly Glu Val Tyr Thr Cys Gln Val Glu His Pro Ser
 195 200 205
 Val Thr Ser Pro Leu Thr Val Glu Trp Arg Ala Arg Ser Glu Ser Ala
 210 215 220
 Gln Ser Lys Met Leu Ser Gly Val Gly Gly Phe Val Leu Gly Leu Leu
 225 230 235 240
 Phe Leu Gly Ala Gly Leu Phe Ile Tyr Phe Arg Asn Gln Lys Gly His
 245 250 255
 Ser Gly Leu Gln Pro Arg Gly Phe Leu Ser *
 260 265 266

<210> 382
 <211> 326
 <212> PRT
 <213> Homo sapiens

<400> 382
 Met Met Ser Pro Ser Gln Ala Ser Leu Leu Phe Leu Asn Val Cys Ile
 1 5 10 15
 Phe Ile Cys Gly Glu Val Val Gln Gly Asn Cys Val His His Ser Thr
 20 25 30
 Asp Ser Ser Val Val Asn Ile Val Glu Asp Gly Ser Asn Ala Lys Asp
 35 40 45
 Glu Ser Lys Ser Asn Asp Thr Val Cys Lys Glu Asp Cys Glu Glu Ser
 50 55 60
 Cys Asp Val Lys Thr Lys Ile Thr Arg Glu Glu Lys His Phe Met Cys
 65 70 75 80
 Arg Asn Leu Gln Asn Ser Ile Val Ser Tyr Thr Arg Ser Thr Lys Lys
 85 90 95
 Leu Leu Arg Asn Met Met Asp Glu Gln Gln Ala Ser Leu Asp Tyr Leu
 100 105 110
 Ser Asn Gln Val Asn Glu Leu Met Asn Arg Val Leu Leu Leu Thr Thr
 115 120 125
 Glu Val Phe Arg Lys Gln Leu Asp Pro Phe Pro His Arg Pro Val Gln
 130 135 140
 Ser His Gly Leu Asp Cys Thr Asp Ile Lys Asp Thr Ile Gly Ser Val
 145 150 155 160
 Thr Lys Thr Pro Ser Gly Leu Tyr Ile Ile His Pro Glu Gly Ser Ser
 165 170 175
 Tyr Pro Phe Glu Val Met Cys Asp Met Asp Tyr Arg Gly Gly Gly Trp
 180 185 190
 Thr Val Ile Gln Lys Arg Ile Asp Gly Ile Ile Asp Phe Gln Arg Leu
 195 200 205
 Trp Cys Asp Tyr Leu Asp Gly Phe Gly Asp Leu Leu Gly Asp Ala Phe
 210 215 220
 Arg Gly Leu Lys Lys Glu Asp Asn Gln Asn Ala Met Pro Phe Ser Thr
 225 230 235 240
 Ser Asp Val Asp Asn Asp Gly Cys Arg Pro Ala Cys Leu Val Asn Gly
 245 250 255
 Gln Ser Val Lys Ser Cys Ser His Leu His Asn Lys Thr Gly Trp Trp
 260 265 270
 Phe Asn Glu Cys Gly Leu Ala Asn Leu Asn Gly Ile His His Phe Ser
 275 280 285
 Gly Lys Leu Leu Ala Thr Gly Ile Gln Trp Gly Thr Trp Thr Lys Asn
 290 295 300
 Asn Ser Pro Val Lys Ile Lys Ser Val Ser Met Lys Ile Arg Arg Met
 305 310 315 320
 Tyr Asn Pro Tyr Phe Lys
 325 326

<210> 383
 <211> 71
 <212> PRT
 <213> Homo sapiens

<400> 383
 Met Arg Thr Trp Ser Lys Val Ile Pro Ser Leu Trp Leu Lys Phe Ser
 1 5 10 15

Arg Gly Phe Ile Ile Leu Arg Phe His Phe Leu Met Ile Ile Trp Pro
 20 25 30
 Asp Ile Pro Ser Ser Met Tyr Ile Cys Met Ser Phe Ile Thr Ala Phe
 35 40 45
 Lys Asn Leu Phe Met Phe Gly Ile Asn Arg Ile Lys Lys Ile Ser Val
 50 55 60
 Val Ser Arg Asn Thr Leu *
 65 70

<210> 384

<211> 405

<212> PRT

<213> Homo sapiens

<400> 384

Met Ala Ser Ser Gly Pro Ala Met Leu Arg Gly Pro Trp Arg Phe Phe
 1 5 10 15
 Trp Leu Phe Leu Leu Leu Leu Leu Pro Gly Ala Pro Asp Pro Arg Val
 20 25 30
 Arg Ser Arg Pro Trp Glu Gly Thr Asp Glu Pro Gly Ser Ala Trp Ala
 35 40 45
 Trp Pro Gly Phe Gln Arg Leu Gln Glu Gln Leu Arg Ala Ala Gly Ala
 50 55 60
 Leu Ser Lys Arg Tyr Trp Thr Leu Phe Ser Cys Gln Val Trp Pro Asp
 65 70 75 80
 Asp Cys Asp Glu Asp Glu Glu Ala Ala Thr Gly Pro Leu Gly Trp Arg
 85 90 95
 Leu Pro Leu Leu Gly Gln Arg Tyr Leu Asp Leu Leu Thr Thr Trp Tyr
 100 105 110
 Cys Ser Phe Lys Asp Cys Cys Pro Arg Gly Asp Cys Arg Ile Ser Asn
 115 120 125
 Asn Phe Thr Gly Leu Glu Trp Asp Leu Asn Val Arg Leu His Gly Gln
 130 135 140
 His Leu Val Gln Gln Leu Val Leu Arg Thr Val Arg Gly Tyr Leu Glu
 145 150 155 160
 Thr Pro Gln Pro Glu Lys Ala Leu Ala Leu Ser Phe His Gly Trp Ser
 165 170 175
 Gly Thr Gly Lys Asn Phe Val Ala Arg Met Leu Val Glu Asn Leu Tyr
 180 185 190
 Arg Asp Gly Leu Met Ser Asp Cys Val Arg Met Phe Ile Ala Thr Phe
 195 200 205
 His Phe Pro His Pro Lys Tyr Val Asp Leu Tyr Lys Glu Gln Leu Met
 210 215 220
 Ser Gln Ile Arg Glu Thr Gln Gln Leu Cys His Gln Thr Leu Phe Ile
 225 230 235 240
 Phe Asp Glu Ala Glu Lys Leu His Pro Gly Leu Leu Glu Val Leu Gly
 245 250 255
 Pro His Leu Glu Arg Arg Ala Pro Glu Gly His Arg Ala Glu Ser Pro
 260 265 270
 Trp Thr Ile Phe Leu Phe Leu Ser Asn Leu Arg Gly Asp Ile Ile Asn
 275 280 285
 Glu Val Val Leu Lys Leu Leu Lys Ala Gly Trp Ser Arg Glu Glu Ile
 290 295 300
 Thr Met Glu His Leu Glu Pro His Leu Gln Ala Glu Ile Val Glu Thr
 305 310 315 320
 Ile Asp Asn Gly Phe Gly His Ser Arg Leu Val Lys Glu Asn Leu Ile
 325 330 335
 Asp Tyr Phe Ile Pro Phe Leu Pro Leu Glu Tyr Arg His Val Arg Leu
 340 345 350
 Cys Ala Arg Asp Ala Phe Leu Ser Gln Glu Leu Leu Tyr Lys Glu Glu
 355 360 365

Thr Leu Asp Glu Ile Ala Gln Met Met Val Tyr Val Pro Lys Glu Glu
 370 375 380
 Gln Leu Phe Ser Ser Gln Gly Cys Lys Ser Ile Ser Gln Arg Ile Asn
 385 390 395 400
 Tyr Phe Leu Ser *
 404

<210> 385
 <211> 39
 <212> PRT
 <213> Homo sapiens

<400> 385
 Met Leu Ala Met Glu Val Arg Lys Ile Lys Val Thr Lys Asn Lys Lys
 1 5 10 15
 Arg Glu Lys Met Leu Leu Leu Phe Met Glu Glu Lys Gly Lys Tyr Phe
 20 25 30
 Lys Leu Thr Val Asn Phe *
 35 38

<210> 386
 <211> 46
 <212> PRT
 <213> Homo sapiens

<400> 386
 Met Leu Cys Ser Leu Phe His Ile Leu Ile Val Thr Leu Leu Leu Ala
 1 5 10 15
 Ile Ser Phe Gly Met Ser Ser Arg Asn Thr Leu Asn Met Val Asn Ser
 20 25 30
 Lys Ile Lys Glu His Ser Leu His Arg Lys Leu Glu Ile *
 35 40 45

<210> 387
 <211> 70
 <212> PRT
 <213> Homo sapiens

<400> 387
 Met Phe Trp Thr Leu Val Gln Gly Met Ser Leu Leu Cys Leu Thr Asp
 1 5 10 15
 Val Phe Gln Ala Leu Pro Ser Ile Cys Ile Ala Asn Ser Glu Ile Tyr
 20 25 30
 Tyr Thr Val Leu Thr Leu Met Gln Phe Ser Cys Leu Trp Met Val Leu
 35 40 45
 Ser Gly Lys Lys Val Ile Phe Ser Ser Glu Leu Met Val Arg Lys Gly
 50 55 60
 Arg Arg Ser Trp Lys *
 65 69

<210> 388
 <211> 48
 <212> PRT

<213> Homo sapiens

<400> 388

```

Met Tyr Leu Lys Pro Leu Ile Tyr Phe Ser Ile Leu Ile Phe Leu Ser
 1           5           10           15
Gln Arg Ser Lys Leu Ser Leu Pro Tyr Asn Val His Asn Cys Met Asn
           20           25           30
Ile Gly Glu Asp Arg Arg Pro Gln Lys Val Gln Leu Leu Gln Leu Tyr
      35           40           45           48

```

<210> 389

<211> 50

<212> PRT

<213> Homo sapiens

<400> 389

```

Met Leu Pro Leu Ala Leu Ile Val Asp Leu Ile Tyr Pro Trp Val Gln
 1           5           10           15
Val Arg Gly Pro Glu Asp Pro Asn His Gly Thr Thr Glu Arg Lys Arg
           20           25           30
Glu Glu Val Thr Cys Leu Gly Ala Ala Arg Leu Ser Leu Glu Ala Ala
      35           40           45
Arg *
 49

```

<210> 390

<211> 237

<212> PRT

<213> Homo sapiens

<400> 390

```

Met Thr Ala Glu Phe Leu Ser Leu Leu Cys Leu Gly Leu Cys Leu Gly
 1           5           10           15
Tyr Glu Asp Glu Lys Lys Asn Glu Lys Pro Pro Lys Pro Ser Leu His
           20           25           30
Ala Trp Pro Ser Ser Val Val Glu Ala Glu Ser Asn Val Thr Leu Lys
      35           40           45
Cys Gln Ala His Ser Gln Asn Val Thr Phe Val Leu Arg Lys Val Asn
      50           55           60
Asp Ser Gly Tyr Lys Gln Glu Gln Ser Ser Ala Glu Asn Glu Ala Glu
      65           70           75           80
Phe Pro Phe Thr Asp Leu Lys Pro Lys Asp Ala Gly Arg Tyr Phe Cys
           85           90           95
Ala Tyr Lys Thr Thr Ala Ser His Glu Trp Ser Glu Ser Ser Glu His
           100          105          110
Leu Gln Leu Val Val Thr Asp Lys His Asp Glu Leu Glu Ala Pro Ser
           115          120          125
Met Lys Thr Asp Thr Arg Thr Ile Phe Val Ala Ile Phe Ser Cys Ile
           130          135          140
Ser Ile Leu Leu Leu Phe Leu Ser Val Phe Ile Tyr Arg Cys Ser
           145          150          155          160
Gln His Ser Ser Ser Ser Glu Glu Ser Thr Lys Arg Thr Ser His Ser
           165          170          175
Lys Leu Pro Glu Gln Glu Ala Ala Glu Ala Asp Leu Ser Asn Met Glu
           180          185          190

```

Arg Val Ser Leu Ser Thr Ala Asp Pro Gln Gly Val Thr Tyr Ala Glu
 195 200 205
 Leu Ser Thr Ser Ala Leu Phe Glu Ala Ala Ser Asp Pro Thr Gln Glu
 210 215 220
 Pro Pro Gly Phe His Glu Tyr Ala Ala Leu Lys Val *
 225 230 235 236

<210> 391
 <211> 305
 <212> PRT
 <213> Homo sapiens

<400> 391
 Met Pro Leu Leu Thr Leu Tyr Leu Leu Leu Phe Trp Leu Ser Gly Tyr
 1 5 10 15
 Ser Ile Val Thr Gln Ile Thr Gly Pro Thr Thr Val Asn Gly Leu Glu
 20 25 30
 Arg Gly Ser Leu Thr Val Gln Cys Val Tyr Arg Ser Gly Trp Glu Thr
 35 40 45
 Tyr Leu Lys Trp Trp Cys Arg Gly Ala Ile Trp Arg Asp Cys Lys Ile
 50 55 60
 Leu Val Lys Thr Ser Gly Ser Glu Gln Glu Val Lys Arg Asp Arg Val
 65 70 75 80
 Ser Ile Lys Asp Asn Gln Lys Asn Arg Thr Phe Thr Val Thr Met Glu
 85 90 95
 Asp Leu Met Lys Thr Asp Ala Asp Thr Tyr Trp Cys Gly Ile Glu Lys
 100 105 110
 Thr Gly Asn Asp Leu Gly Val Thr Val Gln Val Thr Ile Asp Pro Ala
 115 120 125
 Ser Thr Pro Ala Pro Thr Thr Pro Thr Ser Thr Thr Phe Thr Ala Pro
 130 135 140
 Val Thr Gln Glu Glu Thr Ser Ser Ser Pro Thr Leu Thr Gly His His
 145 150 155 160
 Leu Asp Asn Arg His Lys Leu Leu Lys Leu Ser Val Leu Leu Pro Leu
 165 170 175
 Ile Phe Thr Ile Leu Leu Leu Leu Val Ala Ala Ser Leu Leu Ala
 180 185 190
 Trp Arg Met Met Lys Tyr Gln Gln Lys Ala Ala Gly Met Ser Pro Glu
 195 200 205
 Gln Val Leu Gln Pro Leu Glu Gly Asp Leu Cys Tyr Ala Asp Leu Thr
 210 215 220
 Leu Gln Leu Ala Gly Thr Ser Pro Arg Lys Ala Thr Thr Lys Leu Ser
 225 230 235 240
 Ser Ala Gln Val Asp Gln Val Glu Val Glu Tyr Val Thr Met Ala Ser
 245 250 255
 Leu Pro Lys Glu Asp Ile Ser Tyr Ala Ser Leu Thr Leu Gly Ala Glu
 260 265 270
 Asp Gln Glu Pro Thr Tyr Cys Asn Met Gly His Leu Ser Ser His Leu
 275 280 285
 Pro Gly Arg Gly Pro Glu Glu Pro Thr Glu Tyr Ser Thr Ile Ser Arg
 290 295 300
 Pro
 305

<210> 392
 <211> 124
 <212> PRT
 <213> Homo sapiens

<400> 392
 Met Arg Ile Ser Cys Pro Trp Cys Leu Trp Asn Leu Ser Leu Glu Val
 1 5 10 15
 Gly Gly Thr Val Ala Thr Thr Ala Gln Gln His Ile Ala Glu Val Cys
 20 25 30
 Arg Ser Ser Gln Ala Gly Arg Gly Phe Leu His Cys Leu His Pro Ala
 35 40 45
 Leu Gly Thr Ser Gly Cys His Pro Val Pro Cys Ser Ser Ser Leu Val
 50 55 60
 Gly Phe Gly Trp Arg Gly Tyr Ser Gly Glu Ala Ser Trp Gly Arg Ala
 65 70 75 80
 Ser Ser Arg Pro Ala Ala Pro Thr Pro Pro Met Pro Ala Asn Val Gln
 85 90 95
 Ala Gly Trp Glu Gln Ser Val Arg Leu Leu Cys His Ser Trp Leu Arg
 100 105 110
 Leu Ala Ala Leu His Val Thr His Glu Glu Ser *
 115 120 123

<210> 393
 <211> 46
 <212> PRT
 <213> Homo sapiens

<400> 393
 Met Ser Gln Gln Ser Trp Phe Thr Val Tyr Leu Phe Tyr Leu Leu Arg
 1 5 10 15
 Ser Asn Ile Trp Leu Glu Met Gly Ile Pro Lys Tyr Val Lys Glu Val
 20 25 30
 Glu Leu Arg Ser Leu Asp Phe Thr Ser Asn Tyr Phe Ser *
 35 40 45

<210> 394
 <211> 237
 <212> PRT
 <213> Homo sapiens

<400> 394
 Met Glu Phe Gly Leu Ser Cys Ile Phe Leu Ala Ala Ile Leu Lys Gly
 1 5 10 15
 Val Gln Cys Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Lys
 20 25 30
 Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Ser Phe
 35 40 45
 Ser Lys Ala Tyr Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu
 50 55 60
 Glu Trp Val Gly Arg Ile Lys Thr Lys Lys Asp Ala Gly Thr Thr Asp
 65 70 75 80
 Tyr Ala Ala Pro Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asp Ser
 85 90 95
 Glu Asn Thr Leu His Leu Gln Leu Asn Ser Leu Lys Thr Glu Asp Thr
 100 105 110
 Gly Ile Tyr Cys Cys Thr Asp Pro Thr Trp Tyr Ala Ala Val Gly
 115 120 125
 Gly Ser Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser
 130 135 140
 Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr
 145 150 155 160

Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro
 165 170 175
 Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val
 180 185 190
 His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser
 195 200 205
 Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile
 210 215 220
 Cys Asn Val Asn His Lys Pro Val Leu Arg Ala Leu *
 225 230 235 236

<210> 395
 <211> 478
 <212> PRT
 <213> Homo sapiens

<400> 395
 Met Glu Phe Gly Leu Ser Trp Val Phe Leu Val Ala Leu Leu Arg Gly
 1 5 10 15
 Val Gln Cys Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln
 20 25 30
 Pro Gly Arg Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe
 35 40 45
 Ser Asn Tyr Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu
 50 55 60
 Glu Trp Val Ala Ala Ile Trp Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala
 65 70 75 80
 Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn
 85 90 95
 Thr Leu Tyr Met Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val
 100 105 110
 Tyr Tyr Cys Ala Arg Glu Gly Arg Trp Val Arg Tyr Thr Thr Val Thr
 115 120 125
 Thr Ile Gly Tyr Tyr Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr
 130 135 140
 Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro
 145 150 155 160
 Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu Val
 165 170 175
 Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala
 180 185 190
 Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly
 195 200 205
 Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly
 210 215 220
 Thr Gln Thr Tyr Ile Cys Asn Val Asn His Lys Pro Ser Asn Thr Lys
 225 230 235 240
 Val Asp Lys Arg Val Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys
 245 250 255
 Pro Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu
 260 265 270
 Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu
 275 280 285
 Val Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys
 290 295 300
 Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys
 305 310 315 320
 Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu
 325 330 335
 Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys
 340 345 350

Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys
 355 360 365
 Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser
 370 375 380
 Arg Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys
 385 390 395 400
 Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln
 405 410 415
 Pro Glu Asn Asn Tyr Lys Thr Thr Pro Val Leu Asp Ser Asp Gly
 420 425 430
 Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln
 435 440 445
 Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn
 450 455 460
 His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys *
 465 470 475 477

<210> 396
 <211> 292
 <212> PRT
 <213> Homo sapiens

<400> 396
 Met Ala Met Leu Leu Gly Ala Ser Val Leu Ile Leu Trp Leu Gln Pro
 1 5 10 15
 Asp Trp Val Asn Ser Gln Gln Lys Asn Asp Asp Gln Gln Val Lys Gln
 20 25 30
 Asn Ser Pro Ser Leu Ser Val Gln Glu Gly Arg Ile Ser Ile Leu Asn
 35 40 45
 Cys Asp Tyr Thr Asn Ser Met Phe Asp Tyr Phe Leu Trp Tyr Lys Lys
 50 55 60
 Tyr Pro Ala Glu Gly Pro Thr Phe Leu Ile Ser Ile Ser Ser Ile Lys
 65 70 75 80
 Asp Lys Asn Glu Asp Gly Arg Phe Thr Val Phe Leu Asn Lys Ser Ala
 85 90 95
 Lys Gln Phe Ser Leu His Ile Val Pro Ser Gln Pro Gly Asp Ser Ala
 100 105 110
 Val Tyr Phe Cys Ala Ala Ser Ser Phe Ser Tyr Ser Gly Gly Gly
 115 120 125
 Ala Asp Gly Leu Thr Phe Gly Lys Gly Thr His Leu Ile Ile Gln Pro
 130 135 140
 Tyr Ile Gln Asn Pro Asp Pro Ala Val Tyr Gln Leu Arg Asp Ser Lys
 145 150 155 160
 Ser Ser Asp Lys Ser Val Cys Leu Phe Thr Asp Phe Asp Ser Gln Thr
 165 170 175
 Asn Val Ser Gln Ser Lys Asp Ser Asp Val Tyr Ile Thr Asp Lys Thr
 180 185 190
 Val Leu Asp Met Arg Ser Met Asp Phe Lys Ser Asn Ser Ala Val Ala
 195 200 205
 Trp Ser Asn Lys Ser Asp Phe Ala Cys Ala Asn Ala Phe Asn Asn Ser
 210 215 220
 Ile Ile Pro Glu Asp Thr Phe Phe Pro Ser Pro Glu Ser Ser Cys Asp
 225 230 235 240
 Val Lys Leu Val Glu Lys Ser Phe Glu Thr Asp Thr Asn Leu Asn Phe
 245 250 255
 Gln Asn Leu Ser Val Ile Gly Phe Arg Ile Leu Leu Leu Lys Val Ala
 260 265 270
 Gly Phe Asn Leu Leu Met Thr Leu Arg Leu Trp Val Gln Leu Arg Ser
 275 280 285
 Ala Arg Leu *
 290 291

<210> 397
 <211> 48
 <212> PRT
 <213> Homo sapiens

<400> 397
 Met Val Leu Arg Leu Pro Trp Trp Gly Val Leu Ala Tyr Gly Asn Asp
 1 5 10 15
 Val Gly Phe Gly Phe Tyr Ser Phe Leu Cys Tyr Gln Ile Asn Pro Pro
 20 25 30
 Thr Cys Pro Ile Leu Trp Leu Trp Glu Val Leu Thr Val Gly Lys Ser
 35 40 45 48

<210> 398
 <211> 370
 <212> PRT
 <213> Homo sapiens

<400> 398
 Met Ala Asp Ser Ala Gln Ala Gln Lys Leu Val Tyr Leu Val Thr Gly
 1 5 10 15
 Gly Cys Gly Phe Leu Gly Glu His Val Val Arg Met Leu Leu Gln Arg
 20 25 30
 Glu Pro Arg Leu Gly Glu Leu Arg Val Phe Asp Gln His Leu Gly Pro
 35 40 45
 Trp Leu Glu Glu Leu Lys Thr Gly Pro Val Arg Val Thr Ala Ile Gln
 50 55 60
 Gly Asp Val Thr Gln Ala His Glu Val Ala Ala Val Ala Gly Ala
 65 70 75 80
 His Val Val Ile His Thr Ala Gly Leu Val Asp Val Phe Gly Arg Ala
 85 90 95
 Ser Pro Lys Thr Ile His Glu Val Asn Val Gln Gly Thr Arg Asn Val
 100 105 110
 Ile Glu Ala Cys Val Gln Thr Gly Thr Arg Phe Leu Val Tyr Thr Ser
 115 120 125
 Ser Met Glu Val Val Gly Pro Asn Thr Lys Gly His Pro Phe Tyr Arg
 130 135 140
 Gly Asn Glu Asp Thr Pro Tyr Glu Ala Val His Arg His Pro Tyr Pro
 145 150 155 160
 Cys Ser Lys Ala Leu Ala Glu Trp Leu Val Leu Glu Ala Asn Gly Arg
 165 170 175
 Lys Val Arg Gly Gly Leu Pro Leu Val Thr Cys Ala Leu Arg Pro Thr
 180 185 190
 Gly Ile Tyr Gly Glu Gly His Gln Ile Met Arg Asp Phe Tyr Arg Gln
 195 200 205
 Gly Leu Arg Leu Gly Gly Trp Leu Phe Arg Ala Ile Pro Ala Ser Val
 210 215 220
 Glu His Gly Arg Val Tyr Val Gly Asn Val Ala Trp Met His Val Leu
 225 230 235 240
 Ala Ala Arg Glu Leu Glu Gln Arg Ala Ala Leu Met Gly Gly Gln Val
 245 250 255
 Tyr Phe Cys Tyr Asp Gly Ser Pro Tyr Arg Ser Tyr Glu Asp Phe Asn
 260 265 270
 Met Glu Phe Leu Gly Pro Cys Gly Leu Arg Leu Val Gly Ala Arg Pro
 275 280 285

Leu Leu Pro Tyr Trp Leu Leu Val Phe Leu Ala Ala Leu Asn Ala Leu
 290 295 300
 Leu Gln Trp Leu Leu Arg Pro Leu Val Leu Tyr Ala Pro Leu Leu Asn
 305 310 315 320
 Pro Tyr Thr Leu Ala Val Ala Asn Thr Thr Phe Thr Val Ser Thr Asp
 325 330 335
 Lys Ala Gln Arg His Phe Gly Tyr Glu Pro Leu Phe Ser Trp Glu Asp
 340 345 350
 Ser Arg Thr Arg Thr Ile Leu Trp Val Gln Ala Ala Thr Gly Ser Ala
 355 360 365
 Gln *
 369

<210> 399
 <211> 248
 <212> PRT
 <213> Homo sapiens

<400> 399
 Met Leu Gly Gly Lys Gly Leu Met Ser Val Arg Tyr Leu Glu Ile Phe
 1 5 10 15
 Phe Met Lys Pro Leu Pro Pro Asn Ile Lys Asp Arg Leu Ile Lys Ile
 20 25 30
 Met Ser Met Gln Gly Gln Ile Thr Asp Ser Asn Ile Ser Glu Ile Leu
 35 40 45
 His Pro Glu Val Gln Thr Leu Asp Leu Arg Ser Cys Asp Ile Ser Asp
 50 55 60
 Ala Ala Leu Leu His Leu Ser Asn Cys Arg Lys Leu Lys Lys Leu Asn
 65 70 75 80
 Leu Asn Ala Ser Lys Gly Asn Arg Val Ser Val Thr Ser Glu Gly Ile
 85 90 95
 Lys Ala Val Ala Ser Ser Cys Ser Tyr Leu His Glu Ala Ser Leu Lys
 100 105 110
 Arg Cys Cys Asn Leu Thr Asp Glu Gly Val Val Ala Leu Ala Leu Asn
 115 120 125
 Cys Gln Leu Leu Lys Ile Ile Asp Leu Gly Gly Cys Leu Ser Ile Thr
 130 135 140
 Asp Val Ser Leu His Ala Leu Gly Lys Asn Cys Pro Phe Leu Gln Cys
 145 150 155 160
 Val Asp Phe Ser Ala Thr Gln Val Ser Asp Ser Gly Val Ile Ala Leu
 165 170 175
 Val Ser Gly Pro Cys Ala Lys Lys Leu Glu Glu Ile His Met Gly His
 180 185 190
 Cys Val Asn Leu Thr Asp Gly Ala Val Glu Ala Val Leu Thr Tyr Cys
 195 200 205
 Pro Gln Ile Arg Ile Leu Leu Phe His Gly Cys Pro Leu Ile Thr Asp
 210 215 220
 His Ser Arg Glu Val Leu Glu Gln Leu Val Gly Pro Asn Lys Leu Lys
 225 230 235 240
 Gln Val Thr Trp Thr Val Tyr *
 245 247

<210> 400
 <211> 568
 <212> PRT
 <213> Homo sapiens

<400> 400

Met	Asp	Ser	Ile	Leu	Ile	Pro	Pro	Leu	Thr	Lys	Arg	Leu	Lys	Met	Gly
1				5					10					15	
Lys	Ser	Leu	Tyr	Leu	Ser	Val	Pro	Gln	Phe	Pro	Ala	Cys	Asn	Thr	Tyr
		20						25					30		
Ser	Cys	Ser	Leu	Asn	Leu	Arg	Asp	Ala	Asn	Glu	Ala	Asp	Thr	Gly	Thr
	35						40					45			
Tyr	Phe	Phe	Gln	Val	Glu	Arg	Gly	Tyr	Tyr	Met	Lys	Tyr	Ser	Tyr	Gly
	50					55					60				
Asn	Glu	Lys	Leu	Phe	Leu	His	Val	Thr	Arg	Pro	Pro	Leu	Ser	Leu	Glu
65					70					75					80
Pro	Ala	Val	Pro	Glu	Arg	Arg	Thr	Leu	Arg	Asn	Arg	Arg	Ser	Leu	Ala
				85					90					95	
Ala	Leu	Ala	Pro	Leu	Thr	Pro	Asp	Met	Leu	Leu	Leu	Leu	Leu	Pro	Leu
			100					105						110	
Leu	Trp	Gly	Arg	Glu	Arg	Ala	Glu	Gly	Gln	Thr	Ser	Lys	Leu	Leu	Thr
	115						120					125			
Met	Gln	Ser	Ser	Val	Thr	Val	Gln	Glu	Gly	Leu	Cys	Val	His	Val	Pro
130						135					140				
Cys	Ser	Phe	Ser	Tyr	Pro	Ser	His	Gly	Trp	Ile	Tyr	Pro	Gly	Pro	Val
145					150					155					160
Val	His	Gly	Tyr	Trp	Phe	Arg	Glu	Gly	Ala	Asn	Thr	Asp	Gln	Asp	Ala
				165					170					175	
Pro	Val	Ala	Thr	Asn	Asn	Pro	Ala	Arg	Ala	Val	Trp	Glu	Glu	Thr	Arg
				180				185					190		
Asp	Arg	Phe	His	Leu	Leu	Gly	Asp	Pro	His	Thr	Glu	Asn	Cys	Thr	Leu
	195						200					205			
Ser	Ile	Arg	Asp	Ala	Arg	Arg	Ser	Asp	Ala	Gly	Arg	Tyr	Phe	Phe	Arg
	210					215					220				
Met	Glu	Lys	Gly	Ser	Ile	Lys	Trp	Asn	Tyr	Lys	His	His	Arg	Leu	Ser
225					230					235					240
Val	Asn	Val	Thr	Ala	Leu	Thr	His	Arg	Pro	Asn	Ile	Leu	Ile	Pro	Gly
			245						250					255	
Thr	Leu	Glu	Ser	Gly	Cys	Pro	Gln	Asn	Leu	Thr	Cys	Ser	Val	Pro	Trp
			260					265					270		
Ala	Cys	Glu	Gln	Gly	Thr	Pro	Pro	Met	Ile	Ser	Trp	Ile	Gly	Thr	Ser
	275						280						285		
Val	Ser	Pro	Leu	Asp	Pro	Ser	Thr	Thr	Arg	Ser	Ser	Val	Leu	Thr	Leu
	290					295					300				
Ile	Pro	Gln	Pro	Gln	Asp	His	Gly	Thr	Ser	Leu	Thr	Cys	Gln	Val	Thr
305					310					315					320
Phe	Pro	Gly	Ala	Ser	Val	Thr	Thr	Asn	Lys	Thr	Val	His	Leu	Asn	Val
				325					330					335	
Ser	Tyr	Pro	Pro	Gln	Asn	Leu	Thr	Met	Thr	Val	Phe	Gln	Gly	Asp	Gly
		340						345					350		
Thr	Val	Ser	Thr	Val	Leu	Gly	Asn	Gly	Ser	Ser	Leu	Ser	Leu	Pro	Glu
	355						360					365			
Gly	Gln	Ser	Leu	Arg	Leu	Val	Cys	Ala	Val	Asp	Ala	Val	Asp	Ser	Asn
	370					375				380					
Pro	Pro	Ala	Arg	Leu	Ser	Leu	Ser	Trp	Arg	Gly	Leu	Thr	Leu	Cys	Pro
385					390					395					400
Ser	Gln	Pro	Ser	Asn	Pro	Gly	Val	Leu	Glu	Leu	Pro	Trp	Val	His	Leu
				405					410					415	
Arg	Asp	Glu	Ala	Glu	Phe	Thr	Cys	Arg	Ala	Gln	Asn	Pro	Leu	Gly	Ser
			420					425					430		
Gln	Gln	Val	Tyr	Leu	Asn	Val	Ser	Leu	Gln	Ser	Lys	Ala	Thr	Ser	Gly
		435					440					445			
Val	Thr	Gln	Gly	Val	Val	Gly	Gly	Ala	Gly	Ala	Thr	Ala	Leu	Val	Phe
	450					455				460					
Leu	Ser	Phe	Cys	Val	Ile	Phe	Val	Val	Val	Arg	Ser	Cys	Arg	Lys	Lys
465					470					475					480
Ser	Ala	Arg	Pro	Ala	Ala	Gly	Val	Gly	Asp	Thr	Gly	Ile	Glu	Asp	Ala
				485					490					495	
Asn	Ala	Val	Arg	Gly	Ser	Ala	Ser	Gln	Gly	Pro	Leu	Thr	Glu	Pro	Trp
			500					505					510		

Ala Glu Asp Ser Pro Pro Asp Gln Pro Pro Pro Ala Ser Ala Arg Ser
 515 520 525
 Ser Val Gly Glu Gly Glu Leu Gln Tyr Ala Ser Leu Ser Phe Gln Met
 530 535 540
 Val Lys Pro Trp Asp Ser Arg Gly Gln Glu Ala Thr Asp Thr Glu Tyr
 545 550 555 560
 Ser Glu Ile Lys Ile His Arg *
 565 567

<210> 401
 <211> 59
 <212> PRT
 <213> Homo sapiens

<400> 401
 Met Leu Phe Gly Leu Ala Leu Gln Leu Ile Leu Asp Leu Lys Leu Thr
 1 5 10 15
 Thr Val Asn Gln Arg Glu Ser Asp Val Ala Arg Val Ala Thr Ala Glu
 20 25 30
 Glu Tyr Ser Lys Lys Gly Leu Leu Gly Gln Glu Thr Leu His Ala Gly
 35 40 45
 Ser Gln Thr Arg Met Gln Ile Leu Ile Ser *
 50 55 58

<210> 402
 <211> 71
 <212> PRT
 <213> Homo sapiens

<400> 402
 Met Leu Lys Leu Leu Cys Ala Ala Glu Val Thr Asn Val Leu Phe Asn
 1 5 10 15
 Cys Val Phe Asp Tyr Gly Cys Pro Lys Thr Phe Cys His Pro Trp Thr
 20 25 30
 Ile Phe Val Leu Phe Trp Ser Ser Leu Glu Gly Gly Phe Ile Ile Ser
 35 40 45
 Tyr Lys Thr Leu Thr Gly Ala Leu Glu Cys Arg Phe Leu Ile Thr Leu
 50 55 60
 Glu Ile Val Thr Ser Glu *
 65 70

<210> 403
 <211> 270
 <212> PRT
 <213> Homo sapiens

<400> 403
 Met Arg Ser Ser Leu Thr Met Val Gly Thr Leu Trp Ala Phe Leu Ser
 1 5 10 15
 Leu Val Thr Ala Val Thr Ser Ser Thr Ser Tyr Phe Leu Pro Tyr Trp
 20 25 30
 Leu Phe Gly Ser Gln Met Gly Lys Pro Val Ser Phe Ser Thr Phe Arg
 35 40 45
 Arg Cys Asn Tyr Pro Val Arg Gly Glu Gly His Ser Leu Ile Met Val
 50 55 60

```

Glu Glu Cys Gly Arg Tyr Ala Ser Phe Asn Ala Ile Pro Ser Leu Ala
 65          70          75          80
Trp Gln Met Cys Thr Val Val Thr Gly Ala Gly Cys Ala Leu Leu Leu
          85          90          95
Leu Val Ala Leu Ala Ala Val Leu Gly Cys Cys Met Glu Glu Leu Ile
          100          105          110
Ser Arg Met Met Gly Arg Cys Met Gly Ala Ala Gln Phe Val Gly Gly
          115          120          125
Leu Leu Ile Ser Ser Gly Cys Ala Leu Tyr Pro Leu Gly Trp Asn Ser
          130          135          140
Pro Glu Ile Met Gln Thr Cys Gly Asn Val Ser Asn Gln Phe Gln Leu
          145          150          155          160
Gly Thr Cys Arg Leu Gly Trp Ala Tyr Tyr Cys Ala Gly Gly Gly Thr
          165          170          175
Pro Ala Ala Met Leu Ile Cys Pro Trp Leu Ser Cys Phe Ala Gly Arg
          180          185          190
Asn Pro Gln Pro Val Ile Leu Gly Gly Lys His His Glu Glu Asn His
          195          200          205
Phe Leu Cys Tyr Gly Ala Trp Pro Leu Pro Ser Thr Leu Glu Leu Arg
          210          215          220
Lys Glu Asp Arg Gly Gly Arg Ala Thr Gly Lys Gln Val Thr Pro Gln
          225          230          235          240
Pro Leu Arg Phe His Val Ser Thr Trp Met Ser Ser Arg Leu Asp Arg
          245          250          255
Val Tyr Ile Ser Ile Thr Lys Ile Gln Ile Phe Gln Ser *
          260          265          269

```

<210> 404

<211> 262

<212> PRT

<213> Homo sapiens

<400> 404

```

Met Lys Ser Ser Leu Thr Val Val Gly Thr Leu Trp Ala Phe Leu Ser
 1          5          10          15
Leu Val Thr Ala Val Thr Ser Ser Thr Ser Tyr Phe Leu Pro Tyr Trp
          20          25          30
Leu Phe Gly Ser Gln Met Gly Lys Pro Val Ser Phe Ser Thr Phe Arg
          35          40          45
Arg Cys Asn Tyr Pro Val Arg Gly Glu Gly His Ser Leu Ile Met Val
          50          55          60
Glu Glu Cys Gly Arg Tyr Ala Ser Phe Asn Ala Ile Pro Ser Leu Ala
          65          70          75          80
Trp Gln Met Cys Thr Val Val Thr Gly Ala Gly Cys Ala Leu Leu Leu
          85          90          95
Leu Glu Ser Leu Ala Ala Val Leu Gly Cys Cys Met Glu Glu Leu Ile
          100          105          110
Ser Arg Met Met Gly Arg Cys Met Gly Ala Ala Gln Phe Val Gly Gly
          115          120          125
Pro Met Gln Pro Phe Cys Glu Ala Phe Pro Asp Leu Leu Leu Thr Ser
          130          135          140
Leu Ala Asp Met Asn Asp Pro Val Thr Pro Arg Gly Ile Trp Gly Arg
          145          150          155          160
Met Asn Gly Gly Gly Trp Gly Gly Gly Leu Leu Ile Ser Ser Gly Cys
          165          170          175
Ala Leu Tyr Pro Leu Gly Trp Asn Ser Pro Glu Ile Met Gln Thr Cys
          180          185          190
Gly Asn Val Ser Asn Gln Phe Gln Leu Gly Thr Cys Arg Leu Gly Trp
          195          200          205
Ala Tyr Tyr Cys Ala Gly Gly Gly Ala Ala Ala Ala Met Leu Ile Cys
          210          215          220

```

Thr Trp Leu Ser Cys Phe Ala Gly Arg Asn Pro Lys Pro Val Ile Leu
 225 230 235 240
 Val Glu Ser Ile Met Arg Asn Thr Asn Ser Tyr Ala Met Glu Leu Asp
 245 250 255
 His Cys Leu Lys Pro *
 260 261

<210> 405
 <211> 547
 <212> PRT
 <213> Homo sapiens

<400> 405
 Met Pro Ala Trp Glu Thr Gly Gly Phe Leu Val Thr Gly Leu Leu Ala
 1 5 10 15
 Asn Ser Gln Gly Phe Arg Met Ser Leu Leu Ser Leu Pro Trp Leu Gly
 20 25 30
 Leu Arg Pro Val Ala Thr Ser Pro Trp Leu Leu Leu Leu Val Val
 35 40 45
 Gly Ser Trp Leu Leu Ala Arg Ile Leu Ala Trp Thr Tyr Ala Phe Tyr
 50 55 60
 Asn Asn Cys Arg Arg Leu Gln Cys Phe Pro Gln Pro Pro Lys Arg Asn
 65 70 75 80
 Trp Phe Trp Gly His Leu Gly Leu Ile Thr Pro Thr Glu Glu Gly Leu
 85 90 95
 Lys Asn Ser Thr Gln Met Ser Ala Thr Tyr Ser Gln Gly Phe Thr Ile
 100 105 110
 Trp Leu Gly Pro Ile Ile Pro Phe Ile Val Leu Cys His Pro Asp Thr
 115 120 125
 Ile Arg Ser Ile Thr Asn Ala Ser Ala Ala Ile Ala Pro Lys Asp Asn
 130 135 140
 Leu Phe Ile Arg Phe Leu Lys Pro Trp Leu Gly Glu Gly Ile Leu Leu
 145 150 155 160
 Ser Gly Gly Asp Lys Trp Ser Arg His Arg Arg Met Leu Thr Pro Ala
 165 170 175
 Phe His Phe Asn Ile Leu Lys Ser Tyr Ile Thr Ile Phe Asn Lys Ser
 180 185 190
 Ala Asn Ile Met Leu Asp Lys Trp Gln His Leu Ala Ser Glu Gly Ser
 195 200 205
 Ser Cys Leu Asp Met Phe Glu His Ile Ser Leu Met Thr Leu Asp Ser
 210 215 220
 Leu Gln Lys Cys Ile Phe Ser Phe Asp Ser His Cys Gln Glu Arg Pro
 225 230 235 240
 Ser Glu Tyr Ile Ala Thr Ile Leu Glu Leu Ser Ala Leu Val Glu Lys
 245 250 255
 Arg Ser Gln His Ile Leu Gln His Met Asp Phe Leu Tyr Tyr Leu Ser
 260 265 270
 His Asp Gly Arg Arg Phe His Arg Ala Cys Arg Leu Val His Asp Phe
 275 280 285
 Thr Asp Ala Val Ile Arg Glu Arg Arg Arg Thr Leu Pro Thr Gln Gly
 290 295 300
 Ile Asp Asp Phe Phe Lys Asp Lys Ala Lys Ser Lys Thr Leu Asp Phe
 305 310 315 320
 Ile Asp Val Leu Leu Leu Ser Lys Asp Glu Asp Gly Lys Ala Leu Ser
 325 330 335
 Asp Glu Asp Ile Arg Ala Glu Ala Asp Thr Phe Met Phe Gly Gly His
 340 345 350
 Asp Thr Thr Ala Ser Gly Leu Ser Trp Val Leu Tyr Asn Leu Ala Arg
 355 360 365
 His Pro Glu Tyr Gln Glu Arg Cys Arg Gln Glu Val Gln Glu Leu Leu
 370 375 380

Lys Asp Arg Asp Pro Lys Glu Ile Glu Trp Asp Asp Leu Ala Gln Leu
 385 390 395 400
 Pro Phe Leu Thr Met Cys Val Lys Glu Ser Leu Arg Leu His Pro Pro
 405 410 415
 Ala Pro Phe Ile Ser Arg Cys Cys Thr Gln Asp Ile Val Leu Pro Asp
 420 425 430
 Gly Arg Val Ile Pro Lys Gly Ile Thr Cys Leu Ile Asp Ile Ile Gly
 435 440 445
 Val His His Asn Pro Thr Val Trp Pro Asp Pro Glu Val Tyr Asp Pro
 450 455 460
 Phe Arg Phe Asp Pro Glu Asn Ser Lys Gly Arg Ser Pro Leu Ala Phe
 465 470 475 480
 Ile Pro Phe Ser Ala Gly Pro Arg Asn Cys Ile Gly Gln Ala Phe Ala
 485 490 495
 Met Ala Glu Met Lys Val Val Leu Ala Leu Met Leu Leu His Phe Arg
 500 505 510
 Phe Leu Pro Asp His Thr Glu Pro Arg Arg Lys Leu Glu Leu Ile Met
 515 520 525
 Arg Ala Glu Gly Gly Leu Trp Leu Arg Val Glu Pro Leu Asn Val Ser
 530 535 540
 Leu Gln *
 545 546

<210> 406
 <211> 569
 <212> PRT
 <213> Homo sapiens

<400> 406
 Met Pro Ala Trp Glu Thr Gly Gly Phe Leu Val Thr Gly Leu Leu Ala
 1 5 10 15
 Asn Ser Gln Gly Phe Arg Met Ser Leu Leu Ser Leu Pro Trp Leu Gly
 20 25 30
 Leu Arg Pro Val Ala Thr Ser Pro Trp Leu Leu Leu Leu Val Val
 35 40 45
 Gly Ser Trp Leu Leu Ala Arg Ile Leu Ala Trp Thr Tyr Ala Phe Tyr
 50 55 60
 Asn Asn Cys Arg Arg Leu Gln Cys Phe Pro Gln Pro Pro Lys Arg Asn
 65 70 75 80
 Trp Phe Trp Gly His Leu Gly Leu Ile Thr Pro Thr Glu Glu Gly Leu
 85 90 95
 Lys Asn Ser Thr Gln Met Ser Ala Thr Tyr Ser Gln Gly Phe Thr Ile
 100 105 110
 Trp Leu Gly Pro Ile Ile Pro Phe Ile Val Leu Cys His Pro Asp Thr
 115 120 125
 Ile Arg Ser Ile Thr Asn Ala Ser Ala Ala Ile Ala Pro Lys Asp Asn
 130 135 140
 Leu Phe Ile Arg Phe Leu Lys Pro Trp Leu Gly Glu Gly Ile Leu Leu
 145 150 155 160
 Ser Gly Gly Asp Lys Trp Ser Arg His Arg Arg Met Leu Thr Pro Ala
 165 170 175
 Phe His Phe Asn Ile Leu Lys Ser Tyr Ile Thr Ile Phe Asn Lys Ser
 180 185 190
 Ala Asn Ile Met Leu Asp Lys Trp Gln His Leu Ala Ser Glu Gly Ser
 195 200 205
 Ser Cys Leu Asp Met Phe Glu His Ile Ser Leu Met Thr Leu Asp Ser
 210 215 220
 Leu Gln Lys Cys Ile Phe Ser Phe Asp Ser His Cys Gln Glu Arg Pro
 225 230 235 240
 Ser Glu Tyr Ile Ala Thr Ile Leu Glu Leu Ser Ala Leu Val Glu Lys
 245 250 255

```

Arg Ser Gln His Ile Leu Gln His Met Asp Phe Leu Tyr Tyr Leu Ser
      260                      265                      270
His Asp Gly Arg Arg Phe His Arg Ala Cys Arg Leu Val His Asp Phe
      275                      280                      285
Thr Asp Ala Val Ile Arg Glu Arg Arg Thr Leu Pro Thr Gln Gly
      290                      295                      300
Ile Asp Asp Phe Phe Lys Asp Lys Ala Lys Ser Lys Thr Leu Asp Phe
      305                      310                      315                      320
Ile Asp Val Leu Leu Leu Ser Lys Asp Glu Asp Gly Lys Ala Leu Ser
      325                      330                      335
Asp Glu Asp Ile Arg Ala Glu Ala Asp Thr Phe Met Phe Gly Gly Pro
      340                      345                      350
Gln Tyr Leu Gly Ala Val His Pro Pro Val Leu Lys Pro Ser Leu Pro
      355                      360                      365
Gly Cys Ser Ser Gly His Asp Thr Thr Ala Ser Gly Leu Ser Trp Val
      370                      375                      380
Leu Tyr Asn Leu Ala Arg His Pro Glu Tyr Gln Glu Arg Cys Arg Gln
      385                      390                      395                      400
Glu Val Gln Glu Leu Leu Lys Asp Arg Asp Pro Lys Glu Ile Glu Trp
      405                      410                      415
Asp Asp Leu Ala Gln Leu Pro Phe Leu Thr Met Cys Val Lys Glu Ser
      420                      425                      430
Leu Arg Leu His Pro Pro Ala Pro Phe Ile Ser Arg Cys Cys Thr Gln
      435                      440                      445
Asp Ile Val Leu Pro Asp Gly Arg Val Ile Pro Lys Gly Ile Thr Cys
      450                      455                      460
Leu Ile Asp Ile Ile Gly Val His His Asn Pro Thr Val Trp Pro Asp
      465                      470                      475                      480
Pro Gly Val Tyr Asp Pro Phe Arg Phe Asp Pro Glu Asn Ser Lys Gly
      485                      490                      495
Arg Ser Pro Leu Ala Phe Ile Pro Phe Ser Ala Gly Pro Arg Asn Cys
      500                      505                      510
Ile Gly Gln Ala Phe Ala Met Ala Glu Met Lys Val Val Leu Ala Leu
      515                      520                      525
Met Leu Leu His Phe Arg Phe Leu Pro Asp His Thr Glu Pro Arg Arg
      530                      535                      540
Lys Leu Glu Leu Ile Met Arg Ala Glu Gly Gly Leu Trp Leu Arg Val
      545                      550                      555                      560
Glu Pro Leu Asn Val Gly Leu Gln *
      565                      568

```

```

<210> 407
<211> 430
<212> PRT
<213> Homo sapiens

```

```

<400> 407
Met Pro Gln Leu Ser Leu Ser Trp Leu Gly Leu Gly Gln Val Ala Ala
  1                      5                      10                      15
Phe Pro Trp Leu Leu Leu Leu Leu Ala Gly Ala Ser Arg Leu Leu Ala
      20                      25                      30
Gly Phe Leu Ala Trp Thr Tyr Ala Phe Tyr Asp Asn Cys Arg Arg Leu
      35                      40                      45
Gln Tyr Phe Pro Gln Pro Pro Lys Gln Lys Trp Phe Trp Gly Gln Pro
      50                      55                      60
Gly Pro Pro Ala Ile Ala Pro Lys Asp Asp Leu Ser Ile Arg Phe Leu
      65                      70                      75                      80
Lys Pro Trp Leu Gly Glu Gly Ile Leu Leu Ser Gly Gly Asp Lys Trp
      85                      90                      95
Ser Arg His Arg Arg Met Leu Thr Pro Ala Phe His Phe Asn Ile Leu
      100                      105                      110

```


Lys Pro Tyr Ile Lys Ile Phe Asn Arg Ser Val Asn Ile Met His Asp
 115 120 125
 Lys Trp Gln His Leu Ala Ser Glu Gly Ser Ser Arg Leu Asp Met Phe
 130 135 140
 Glu His Ile Ser Leu Met Thr Leu Asp Ser Leu Gln Lys Cys Ile Phe
 145 150 155 160
 Ser Phe Asp Ser His Cys Gln Glu Arg Pro Ser Glu Tyr Ile Ala Thr
 165 170 175
 Ile Leu Glu Leu Ser Ala Leu Val Glu Lys Arg Asn Gln His Ile Leu
 180 185 190
 Gln His Met Asp Phe Leu Tyr Tyr Leu Ser His Asp Gly Trp Arg Phe
 195 200 205
 Arg Arg Ala Cys Arg Leu Val His Asp Phe Thr Asp Ala Val Ile Gln
 210 215 220
 Glu Arg Arg His Thr Leu Pro Thr Gln Gly His Asp Thr Thr Ala Ser
 225 230 235 240
 Gly Leu Ser Trp Val Leu Tyr Asn Leu Ala Arg His Pro Glu Tyr Gln
 245 250 255
 Glu His Cys Arg Gln Glu Val Gln Glu Leu Leu Lys Asp Arg Asp Pro
 260 265 270
 Lys Glu Ile Glu Trp Asp Asp Leu Ala Gln Leu Pro Phe Leu Thr Met
 275 280 285
 Cys Val Lys Glu Ser Leu Arg Leu His Pro Pro Ala Pro Phe Ile Ser
 290 295 300
 Arg Cys Cys Thr Gln Asp Ile Val Leu Pro Asp Gly Arg Val Ile Pro
 305 310 315 320
 Lys Gly Ile Thr Cys Leu Ile Asp Ile Ile Gly Val His His Asn Pro
 325 330 335
 Thr Val Trp Pro Asp Pro Glu Val Tyr Asp Pro Phe Arg Phe Asp Pro
 340 345 350
 Glu Asn Ser Lys Gly Arg Ser Pro Leu Ala Phe Ile Pro Phe Ser Ala
 355 360 365
 Gly Pro Arg Asn Cys Ile Gly Gln Ala Phe Ala Met Ala Glu Met Lys
 370 375 380
 Val Val Leu Ala Leu Met Leu Leu His Phe Arg Phe Leu Pro Asp His
 385 390 395 400
 Thr Glu Pro Arg Arg Lys Leu Glu Leu Ile Met Arg Ala Glu Gly Gly
 405 410 415
 Leu Trp Leu Arg Val Glu Pro Leu Asn Val Ser Leu Gln *
 420 425 429

<210> 408

<211> 48

<212> PRT

<213> Homo sapiens

<400> 408

Met Met Arg Arg Cys Thr Gln Pro Thr Cys Pro Leu Thr Cys Ala Val
 1 5 10 15
 Met Pro Ala Glu Leu Trp Leu Thr Arg Cys Gly Lys Ile Trp Gln Arg
 20 25 30
 Gln Arg Pro Asn Phe Ile Pro Gln Thr Leu Gly Gly Gly Gly Ser *
 35 40 45 47

<210> 409

<211> 182

<212> PRT

<213> Homo sapiens

<400> 409

```

Met Thr Leu Arg Pro Ser Leu Leu Pro Leu His Leu Leu Leu Leu
 1      5      10      15
Leu Leu Ser Ala Ala Val Cys Arg Ala Glu Ala Gly Leu Glu Thr Glu
      20      25      30
Ser Pro Val Arg Thr Leu Gln Val Glu Thr Leu Gly Glu Pro Pro Lys
      35      40      45
Pro Cys Ala Glu Pro Ala Ala Phe Gly Asp Thr Leu His Ile His Tyr
      50      55      60
Thr Gly Ser Leu Val Asp Gly Arg Ile Ile Asp Thr Ser Leu Thr Arg
      65      70      75      80
Asp Pro Leu Val Ile Glu Leu Gly Gln Lys Gln Val Ile Pro Gly Leu
      85      90      95
Glu Gln Ser Leu Leu Asp Met Cys Val Gly Glu Lys Arg Arg Ala Ile
      100      105      110
Ile Pro Ser His Leu Ala Tyr Gly Lys Arg Gly Phe Pro Pro Ser Val
      115      120      125
Pro Ala Asp Ala Val Val Gln Tyr Asp Val Glu Leu Ile Ala Leu Ile
      130      135      140
Arg Ala Asn Tyr Trp Leu Lys Leu Val Lys Gly Ile Leu Pro Leu Val
      145      150      155      160
Gly Met Ala Met Val Pro Thr Pro Pro Gly Pro His Trp Val Ser Pro
      165      170      175
Ile Gln Lys Gly Gln *
      180 181

```

<210> 410

<211> 367

<212> PRT

<213> Homo sapiens

<400> 410

```

Met Ala Leu Arg Phe Leu Leu Gly Phe Leu Leu Ala Gly Val Asp Leu
 1      5      10      15
Gly Val Tyr Leu Met Arg Leu Glu Leu Cys Asp Pro Thr Gln Arg Leu
      20      25      30
Arg Val Ala Leu Ala Gly Glu Leu Val Gly Val Gly Gly His Phe Leu
      35      40      45
Phe Leu Gly Leu Ala Leu Val Ser Lys Asp Trp Arg Phe Leu Gln Arg
      50      55      60
Met Ile Thr Ala Pro Cys Ile Leu Phe Leu Phe Tyr Gly Trp Pro Gly
      65      70      75      80
Leu Phe Leu Glu Ser Ala Arg Trp Leu Ile Val Lys Arg Gln Ile Glu
      85      90      95
Glu Ala Gln Ser Val Leu Arg Ile Leu Ala Glu Arg Asn Arg Pro His
      100      105      110
Gly Gln Met Leu Gly Glu Glu Ala Gln Glu Ala Leu Gln Asp Leu Glu
      115      120      125
Asn Thr Cys Pro Leu Pro Ala Thr Ser Ser Phe Ser Phe Ala Ser Leu
      130      135      140
Leu Asn Tyr Arg Asn Ile Trp Lys Asn Leu Leu Ile Leu Gly Phe Thr
      145      150      155      160
Asn Phe Ile Ala His Ala Ile Arg His Cys Tyr Gln Pro Val Gly Gly
      165      170      175
Gly Gly Ser Pro Ser Asp Phe Tyr Leu Cys Ser Leu Leu Ala Ser Gly
      180      185      190
Thr Ala Ala Leu Ala Cys Val Phe Leu Gly Val Thr Val Asp Arg Phe
      195      200      205
Gly Arg Arg Gly Ile Leu Leu Leu Ser Met Thr Leu Thr Gly Ile Ala
      210      215      220

```

```

Ser Leu Val Leu Leu Gly Leu Trp Asp Tyr Leu Asn Glu Ala Ala Ile
225                230                235                240
Thr Thr Phe Ser Val Leu Gly Leu Phe Ser Ser Gln Ala Ala Ala Ile
                245                250                255
Leu Ser Thr Leu Leu Ala Ala Glu Val Ile Pro Thr Thr Val Arg Gly
                260                265                270
Arg Gly Leu Gly Leu Ile Met Ala Leu Gly Ala Leu Gly Gly Leu Ser
                275                280                285
Gly Pro Ala Gln Arg Leu His Met Gly His Gly Ala Phe Leu Gln His
                290                295                300
Val Val Leu Ala Ala Cys Ala Leu Leu Cys Ile Leu Ser Ile Met Leu
305                310                315                320
Leu Pro Glu Thr Lys Arg Lys Leu Leu Pro Glu Val Leu Arg Asp Gly
                325                330                335
Glu Leu Cys Arg Arg Pro Ser Leu Leu Arg Gln Pro Pro Pro Thr Arg
                340                345                350
Cys Asp His Val Pro Leu Leu Ala Thr Pro Asn Pro Ala Leu *
                355                360                365 366

```

<210> 411
 <211> 85
 <212> PRT
 <213> Homo sapiens

```

<400> 411
Met Arg Pro Thr Asn Ser Gly Pro Thr Ser Ser Pro Arg Val Gln Asn
1          5          10          15
Ala Leu Lys Val Thr Val Phe Lys Leu Asn Ser Lys Asn Ala Lys Ala
                20          25          30
Ala Ser Ser Glu Asn Lys Arg Arg Glu Gln Asp Phe Lys Cys Ile Ser
                35          40          45
Asn Pro Arg Ala Arg Asn Arg Thr Thr Val Asn Gln Pro His His Leu
                50          55          60
Val Gln Asp Phe Leu Phe Thr Ile Leu Lys Leu Gly Leu Ser Asn Thr
65          70          75          80
Leu Ile His Ser *
                84

```

<210> 412
 <211> 54
 <212> PRT
 <213> Homo sapiens

```

<400> 412
Met Cys Leu Met Lys Gln Ile Ile Tyr Leu Leu Tyr Val Gly Leu Cys
1          5          10          15
Ser Ile Leu Thr Ala Phe Leu Phe Thr Pro His His Val Leu Glu Arg
                20          25          30
Tyr Arg Tyr Tyr Cys Pro Asp Phe Arg Glu Ile Lys Lys Leu Gly Gln
                35          40          45
Gly Tyr Thr Thr Asn *
                50          53

```

<210> 413
 <211> 106
 <212> PRT

<213> Homo sapiens

<400> 413

```

Met Lys Glu Ala Leu Leu Lys Cys Ser Arg Leu Ala Arg Gly Leu Leu
 1              5              10              15
Leu Cys Leu Asp Cys Ala Asn Asp His Arg Ser Pro Val Glu Arg Asn
              20              25              30
Ala Gln Thr Thr Leu Ile Leu His Ser Ser Leu Tyr Ser Leu Ser Leu
              35              40              45
Gly Asn Gln Leu Gln Gly Gly Gly Glu Met Ala Thr Thr Gly Gly Ser
              50              55              60
Thr Gln Gln Ala Lys Thr Tyr Gly Gly Leu Phe Gln Ile Gly Ala Met
              65              70              75              80
Glu Pro Ala Leu Phe Leu Leu Phe Ile Phe Leu Leu Ala Ser Phe Trp
              85              90              95
Val His Pro Ser Tyr Arg Ile Thr Tyr *
              100              105

```

<210> 414

<211> 48

<212> PRT

<213> Homo sapiens

<400> 414

```

Met Leu Glu Thr Phe Leu Phe Lys Leu Phe Leu Phe Phe Thr Leu Leu
 1              5              10              15
Val Asn Leu Phe Ile Thr Asn Asp Gln Leu Ser Val Gly Ser Ile Phe
              20              25              30
Leu Ser Phe Gln Leu Pro Ala Phe Phe Leu Asp Met Ala Glu Phe *
              35              40              45              47

```

<210> 415

<211> 47

<212> PRT

<213> Homo sapiens

<400> 415

```

Met Thr Phe Leu Leu His Val Leu Val Thr Ala Leu Ser Ser His Ser
 1              5              10              15
Thr Gly Arg Arg Gly Thr Asn Cys Phe Met Leu Leu Ser Ser Gly Asn
              20              25              30
His Pro Ile Pro Cys Gly Ser Leu Thr Pro Tyr Pro His Leu *
              35              40              45              46

```

<210> 416

<211> 41

<212> PRT

<213> Homo sapiens

<400> 416

```

Met Leu Ile Leu Ser His Ser Lys Ile Gln Val Asn Thr Pro Tyr Ser
 1              5              10              15
Ser Val Arg Glu Val Ile Ile Tyr Lys Gly Ala Val Met Lys Ser Thr
              20              25              30

```

Asp Tyr Leu Thr Ser Ser Met Val *
 35 40

<210> 417
 <211> 55
 <212> PRT
 <213> Homo sapiens

<400> 417
 Met Thr Leu Leu Asn Leu Tyr Tyr Leu Asn Ser Phe Leu Leu Tyr Ser
 1 5 10 15
 Lys Arg Phe Glu Gly Ile Ser Phe Cys Val Gln Lys Val Ser Ile Ile
 20 25 30
 Leu Cys Ile His Tyr Leu Arg Ser Thr Thr Ile Trp Asn Lys Leu Phe
 35 40 45
 Phe Arg Asp Val Ser Ala *
 50 54

<210> 418
 <211> 182
 <212> PRT
 <213> Homo sapiens

<400> 418
 Met His Phe Pro Val Asn Cys Phe Phe Lys Ser Leu His Ile Phe Leu
 1 5 10 15
 Leu Leu Gln Val Phe Leu Ala Thr Phe Leu Arg Lys Lys Leu Ser Lys
 20 25 30
 Val Ala Phe Ser Cys Leu Val Glu Phe Phe Tyr Tyr Cys Tyr Tyr Phe
 35 40 45
 Leu Asp Phe Ala Ser Ser Val Ser Phe Leu Phe Cys Phe Val Leu Leu
 50 55 60
 Leu Arg Arg Ser Leu Thr Leu Ser Pro Arg Leu Glu Cys Ser Asp Thr
 65 70 75 80
 Ile Leu Ala His Cys Asn Leu Arg Leu Pro Gly Ser Arg Tyr Ser Ser
 85 90 95
 Ala Ser Thr Ser Arg Val Ala Gly Ile Thr Gly Val His His His Thr
 100 105 110
 Tyr Val Asn Phe Val Trp Thr Val Gln Lys Ala Val His Cys Val Gly
 115 120 125
 Gln Ala Ser Trp Glu Leu Leu Thr Ser Arg Asp Pro Pro Thr Leu Ala
 130 135 140
 Ser His Arg Ala Gly Ile Thr Gly Met Ser His Arg Thr Trp Ala Lys
 145 150 155 160
 Val Phe Leu Lys Arg Val Ile Phe Leu Asn Arg Glu Tyr Asp Leu Thr
 165 170 175
 Met Phe Cys Phe Leu Lys
 180 182

<210> 419
 <211> 67
 <212> PRT
 <213> Homo sapiens

<400> 419

```

Met Leu Val Pro Thr Phe Leu Ser Leu Val Cys Asp Phe Ser Leu Phe
 1          5          10          15
Val Leu Leu Leu Leu Gly Cys Leu Ser Phe Leu Leu Pro Pro His Leu
          20          25          30
Pro Cys Thr Ser Phe Pro Leu His Leu Trp Arg Leu Leu Ser Pro Phe
          35          40          45
Ile Ser Phe Leu Tyr Leu Leu Leu Leu Ser Tyr Lys Met Asn Cys
          50          55          60
Ile Ile *
65 66

```

<210> 420
 <211> 75
 <212> PRT
 <213> Homo sapiens

```

<400> 420
Met Leu Pro Leu Phe Lys His Ser Pro Val Arg Ile Phe Leu Phe Cys
 1          5          10          15
Leu Asn Thr Gln His Leu Ser Val Arg Asn Asn Phe Val Phe Asn Cys
          20          25          30
Val Ser Pro Gly Ile Leu Pro Ile Ser Leu Cys Leu Ala Phe Asn His
          35          40          45
Asp Arg Ser Thr Phe Phe Phe Ser Ile Ile Leu Leu Lys Ala Leu
          50          55          60
Ile Ile Leu Ser Ser Leu Leu Gln Thr Lys *
65          70          74

```

<210> 421
 <211> 78
 <212> PRT
 <213> Homo sapiens

```

<400> 421
Met Lys Pro Ile Leu Leu Val Leu Ser Ser Ile Thr Arg Ala Leu Leu
 1          5          10          15
Leu Gln Ile Ser Ser Val Ser Trp Gln Ser Cys Met Trp Arg Ala Met
          20          25          30
Pro Asp Cys Leu Gln Thr Asp Tyr Pro Ile Ser Leu Gly Phe His Gln
          35          40          45
Arg Thr Arg Leu Leu Asp Ala Leu Cys Pro Val Thr Gln Cys His His
          50          55          60
Ser Ala Trp Pro Cys Val Cys Gln Gly Ala Gln Thr Pro Ile
65          70          75          78

```

<210> 422
 <211> 120
 <212> PRT
 <213> Homo sapiens

```

<400> 422
Met Cys Cys Glu Leu Leu Ala Val Val Ile Ala Thr Leu Ile Ile Lys
 1          5          10          15
Ile Gly Leu Val Val Leu Leu Tyr Phe Ile Lys Leu Leu Ile His Ile
          20          25          30

```

```

Glu Phe Ile Lys Arg His Ser Ile Leu Lys Cys Glu Ser Ile Phe Asn
   35           40           45
Leu Asn Val Gly Ile Arg Met Tyr Pro Gly Gln Val Asn Phe Cys Glu
   50           55           60
Thr Leu Gln Met Leu Asp Gly Phe Gly Arg Ile Phe Gln Thr Lys Trp
   65           70           75           80
Thr Asn Leu Tyr Ser Tyr Ile Asn Ser Asn Phe Thr Lys Cys Cys Lys
           85           90           95
Asn Ser Gly Val Leu Met Val Val Lys Cys Arg Lys Glu Asn Ser Ala
           100           105           110
Leu Lys Glu Cys Leu Thr Ala *
           115           119

```

<210> 423

<211> 860

<212> PRT

<213> Homo sapiens

<400> 423

```

Met Ala Cys Arg Trp Ser Thr Lys Glu Ser Pro Arg Trp Arg Ser Ala
   1           5           10           15
Leu Leu Leu Leu Phe Leu Ala Gly Val Tyr Gly Asn Gly Ala Leu Ala
           20           25           30
Glu His Ser Glu Asn Val His Ile Ser Gly Val Ser Thr Ala Cys Gly
           35           40           45
Glu Thr Pro Glu Gln Ile Arg Ala Pro Ser Gly Ile Ile Thr Ser Pro
           50           55           60
Gly Trp Pro Ser Glu Tyr Pro Ala Lys Ile Asn Cys Ser Trp Phe Ile
           65           70           75           80
Arg Ala Asn Pro Gly Glu Ile Ile Thr Ile Ser Phe Gln Asp Phe Asp
           85           90           95
Ile Gln Gly Ser Arg Arg Cys Asn Leu Asp Trp Leu Thr Ile Glu Thr
           100           105           110
Tyr Lys Asn Ile Glu Ser Tyr Arg Ala Cys Gly Ser Thr Ile Pro Pro
           115           120           125
Pro Tyr Ile Ser Ser Gln Asp His Ile Trp Ile Arg Phe His Ser Asp
           130           135           140
Asp Asn Ile Ser Arg Lys Gly Phe Arg Leu Ala Tyr Phe Ser Gly Lys
           145           150           155           160
Ser Glu Glu Pro Asn Cys Ala Cys Asp Gln Phe Arg Cys Gly Asn Gly
           165           170           175
Lys Cys Ile Pro Glu Ala Trp Lys Cys Asn Asn Met Asp Glu Cys Gly
           180           185           190
Asp Ser Ser Asp Glu Glu Ile Cys Ala Lys Glu Ala Asn Pro Pro Thr
           195           200           205
Ala Ala Ala Phe Gln Pro Cys Ala Tyr Asn Gln Phe Gln Cys Leu Ser
           210           215           220
Arg Phe Thr Lys Val Tyr Thr Cys Leu Pro Glu Ser Leu Lys Cys Asp
           225           230           235           240
Gly Asn Ile Asp Cys Leu Asp Leu Gly Asp Glu Ile Asp Cys Asp Val
           245           250           255
Pro Thr Cys Gly Gln Trp Leu Lys Tyr Phe Tyr Gly Thr Phe Asn Ser
           260           265           270
Pro Asn Tyr Pro Asp Phe Tyr Pro Pro Gly Ser Asn Cys Thr Trp Leu
           275           280           285
Ile Asp Thr Gly Asp His Arg Lys Val Ile Leu Arg Phe Thr Asp Phe
           290           295           300
Lys Leu Asp Gly Thr Gly Tyr Gly Asp Tyr Val Lys Ile Tyr Asp Gly
           305           310           315           320
Leu Glu Glu Asn Pro His Lys Leu Leu Arg Val Leu Thr Ala Phe Asp
           325           330           335

```

Ser His Ala Pro Leu Thr Val Val Ser Ser Ser Gly Gln Ile Arg Val
 340 345 350
 His Phe Cys Ala Asp Lys Val Asn Ala Ala Arg Gly Phe Asn Ala Thr
 355 360 365
 Tyr Gln Val Asp Gly Phe Cys Leu Pro Trp Glu Ile Pro Cys Gly Gly
 370 375 380
 Asn Trp Gly Cys Tyr Thr Glu Gln Gln Arg Cys Asp Gly Tyr Trp His
 385 390 395 400
 Cys Pro Asn Gly Arg Asp Glu Thr Asn Cys Thr Met Cys Gln Lys Glu
 405 410 415
 Glu Phe Pro Cys Ser Arg Asn Gly Val Cys Tyr Pro Arg Ser Asp Arg
 420 425 430
 Cys Asn Tyr Gln Asn His Cys Pro Asn Gly Ser Asp Glu Lys Asn Cys
 435 440 445
 Phe Phe Cys Gln Pro Gly Asn Phe His Cys Lys Asn Asn Arg Cys Val
 450 455 460
 Phe Glu Ser Trp Val Cys Asp Ser Gln Asp Asp Cys Gly Asp Gly Ser
 465 470 475 480
 Asp Glu Glu Asn Cys Pro Val Ile Val Pro Thr Arg Val Ile Thr Ala
 485 490 495
 Ala Val Ile Gly Ser Leu Ile Cys Gly Leu Leu Leu Val Ile Ala Leu
 500 505 510
 Gly Cys Thr Cys Lys Leu Tyr Ser Leu Arg Met Phe Glu Arg Arg Ser
 515 520 525
 Phe Glu Thr Gln Leu Ser Arg Val Glu Ala Glu Leu Leu Arg Arg Glu
 530 535 540
 Ala Pro Pro Ser Tyr Gly Gln Leu Ile Ala Gln Gly Leu Ile Pro Pro
 545 550 555 560
 Val Glu Asp Phe Pro Val Cys Ser Pro Asn Gln Ala Ser Val Leu Glu
 565 570 575
 Asn Leu Arg Leu Ala Val Arg Ser Gln Leu Gly Phe Thr Ser Val Arg
 580 585 590
 Leu Pro Met Ala Gly Arg Ser Ser Asn Ile Trp Asn Arg Ile Phe Asn
 595 600 605
 Phe Ala Arg Ser Arg His Ser Gly Ser Leu Ala Leu Val Ser Ala Asp
 610 615 620
 Gly Asp Glu Val Val Pro Ser Gln Ser Thr Ser Arg Glu Pro Glu Arg
 625 630 635 640
 Asn His Thr His Arg Ser Leu Phe Ser Val Glu Ser Asp Asp Thr Asp
 645 650 655
 Thr Glu Asn Glu Arg Arg Asp Met Ala Gly Ala Ser Gly Gly Val Ala
 660 665 670
 Ala Pro Leu Pro Gln Lys Val Pro Pro Thr Thr Ala Val Glu Ala Thr
 675 680 685
 Val Gly Ala Cys Ala Ser Ser Thr Gln Ser Thr Arg Gly Gly His
 690 695 700
 Ala Asp Asn Gly Arg Asp Val Thr Ser Val Glu Pro Pro Ser Val Ser
 705 710 715 720
 Pro Ala Arg His Gln Leu Thr Ser Ala Leu Ser Arg Met Thr Gln Gly
 725 730 735
 Leu Arg Trp Val Arg Phe Thr Leu Gly Arg Ser Ser Ser Leu Ser Gln
 740 745 750
 Asn Gln Ser Pro Leu Arg Gln Leu Asp Asn Gly Val Ser Gly Arg Glu
 755 760 765
 Asp Asp Asp Val Glu Met Leu Ile Pro Ile Ser Asp Gly Ser Ser
 770 775 780
 Asp Phe Asp Val Asn Asp Cys Ser Arg Pro Leu Leu Asp Leu Ala Ser
 785 790 795 800
 Asp Gln Gly Gln Gly Leu Arg Gln Pro Tyr Asn Ala Thr Asn Pro Gly
 805 810 815
 Val Arg Pro Ser Asn Arg Asp Gly Pro Cys Glu Arg Cys Gly Ile Val
 820 825 830
 His Thr Ala Gln Ile Pro Asp Thr Cys Leu Glu Val Thr Leu Lys Asn
 835 840 845

Glu Thr Ser Asp Asp Glu Ala Leu Leu Leu Cys *
 850 855 859

<210> 424
 <211> 58
 <212> PRT
 <213> Homo sapiens

<400> 424
 Met Thr Lys Leu Met Ser Asn Arg Thr Arg Ile Arg Thr His Val Asn
 1 5 10 15
 Leu Cys Cys Phe Cys Arg Tyr Thr Thr Pro Lys Met Ser Phe Ser Ser
 20 25 30
 Ala Cys Val Ser Leu Cys Leu Met Leu Leu Phe Cys Ser Pro Pro Leu
 35 40 45
 Leu Leu Leu Leu Leu Ser Ser Phe Val *
 50 55 57

<210> 425
 <211> 400
 <212> PRT
 <213> Homo sapiens

<400> 425
 Met Asn Lys Lys Lys Pro Leu His Ser Lys Ser Ser Arg Ile His Gln
 1 5 10 15
 Gln Ile Ile Val Gln Leu Asp Ser Leu Pro Pro Pro Val Phe Ser Glu
 20 25 30
 Gln Val Met Ala Ser Met Ala Ala Val Leu Thr Trp Ala Leu Ala Leu
 35 40 45
 Leu Ser Ala Phe Ser Ala Thr Gln Ala Arg Lys Gly Phe Trp Asp Tyr
 50 55 60
 Phe Ser Gln Thr Ser Gly Asp Lys Gly Arg Val Glu Gln Ile His Gln
 65 70 75 80
 Gln Lys Met Ala Arg Glu Pro Ala Thr Leu Lys Asp Ser Leu Glu Gln
 85 90 95
 Asp Leu Asn Asn Met Asn Lys Phe Leu Glu Lys Leu Arg Pro Leu Ser
 100 105 110
 Gly Ser Glu Ala Pro Arg Leu Pro Gln Asp Pro Val Gly Met Arg Arg
 115 120 125
 Gln Leu Gln Glu Glu Leu Glu Glu Val Lys Ala Arg Leu Gln Pro Tyr
 130 135 140
 Met Ala Glu Ala His Glu Leu Val Gly Trp Asn Leu Glu Gly Leu Arg
 145 150 155 160
 Gln Gln Leu Lys Pro Tyr Thr Met Asp Leu Met Glu Gln Val Ala Leu
 165 170 175
 Arg Val Gln Glu Leu Gln Glu Gln Leu Arg Val Val Gly Glu Asp Thr
 180 185 190
 Lys Ala Gln Leu Leu Gly Gly Val Asp Glu Ala Trp Ala Leu Leu Gln
 195 200 205
 Gly Leu Gln Ser Arg Val Val His His Thr Gly Arg Phe Lys Glu Leu
 210 215 220
 Phe His Pro Tyr Ala Glu Ser Leu Val Ser Gly Ile Gly Arg His Val
 225 230 235 240
 Gln Glu Leu His Arg Ser Val Ala Pro His Ala Pro Ala Ser Pro Ala
 245 250 255
 Arg Leu Ser Arg Cys Val Gln Val Leu Ser Arg Lys Leu Thr Leu Lys
 260 265 270

Ala Lys Ala Leu His Ala Arg Ile Gln Gln Asn Leu Asp Gln Leu Arg
 275 280 285
 Glu Glu Leu Ser Arg Ala Phe Ala Gly Thr Gly Thr Glu Glu Gly Ala
 290 295 300
 Gly Pro Asp Pro Gln Met Leu Ser Glu Glu Val Arg Gln Arg Leu Gln
 305 310 315 320
 Ala Phe Arg Gln Asp Thr Tyr Leu Gln Ile Ala Ala Phe Thr Arg Ala
 325 330 335
 Ile Asp Gln Glu Thr Glu Glu Val Gln Gln Gln Leu Ala Pro Pro Pro
 340 345 350
 Pro Gly His Ser Ala Phe Ala Pro Glu Phe Gln Gln Thr Asp Ser Gly
 355 360 365
 Lys Val Leu Ser Lys Leu Gln Ala Arg Leu Asp Asp Leu Trp Glu Asp
 370 375 380
 Ile Thr His Ser Leu His Asp Gln Gly His Ser His Leu Gly Asp Pro
 385 390 395 400

<210> 426
 <211> 48
 <212> PRT
 <213> Homo sapiens

<400> 426
 Met Phe Ile Gly Leu Gly Ile Ser Phe Leu Asn Cys Pro Ser Leu Phe
 1 5 10 15
 Ala His Phe Ile Leu Phe Cys Pro Leu Pro Leu Phe Gly Ile Phe Ile
 20 25 30
 Ser Tyr Trp Phe Val Arg Leu Leu Ser Ile Asn Arg Gly Trp Lys *
 35 40 45 47

<210> 427
 <211> 313
 <212> PRT
 <213> Homo sapiens

<400> 427
 Met Met Lys Ile Pro His Gln Thr Gln Lys Lys Arg Ser Leu Glu Asp
 1 5 10 15
 Pro Asn Ser Arg Pro Arg Arg Arg Ile Phe Arg Cys Phe His Leu Val
 20 25 30
 Ile Arg Thr Glu Gln Arg Glu Leu Thr Met Glu Phe Gly Leu Ser Trp
 35 40 45
 Leu Phe Leu Val Ala Ile Leu Lys Gly Val Gln Cys Glu Val Gln Leu
 50 55 60
 Leu Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly Ser Leu Arg Leu
 65 70 75 80
 Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr Ala Met Ser Trp
 85 90 95
 Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val Ser Ala Ile Ser
 100 105 110
 Gly Ser Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val Lys Gly Arg Phe
 115 120 125
 Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr Leu Gln Met Asn
 130 135 140
 Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Lys Ser His
 145 150 155 160

```

Pro Gly Tyr Tyr Tyr Asp Ser Ser Gly Tyr Ser Tyr Tyr Phe Asp Tyr
      165      170      175
Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Ser Asp Ile Gln Met
      180      185      190
Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Val Gly Asp Arg Val Thr
      195      200      205
Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Trp Leu Ala Trp Tyr
      210      215      220
Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Lys Ala Ser
225      230      235
Ser Leu Glu Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly
      245      250      255
Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Asp Asp Phe Ala
      260      265      270
Thr Tyr Tyr Cys Gln Gln Tyr Asn Ser Tyr Leu Arg Gly Arg Ser Ala
      275      280      285
Lys Gly Pro Arg Trp Lys Ser Asn Glu Leu Trp Leu His His Leu Ser
      290      295      300
Ser Ser Ser Arg His Leu Met Ser Ser
305      310      313

```

```

<210> 428
<211> 318
<212> PRT
<213> Homo sapiens

```

```

<400> 428
Met Lys Arg Leu Ser Leu Val Thr Thr Asn Arg Leu Ser Pro His Gly
 1      5      10      15
Asn Phe Phe Thr Leu Cys Thr Phe Pro Leu Ala Val Asp Met Ala Ala
      20      25      30
Leu Phe Gln Glu Ala Ser Ser Cys Pro Val Cys Ser Asp Tyr Leu Glu
      35      40      45
Lys Pro Met Ser Leu Glu Cys Gly Cys Ala Val Cys Leu Lys Cys Ile
      50      55      60
Asn Ser Leu Gln Lys Glu Pro His Gly Glu Asp Leu Leu Cys Cys Tyr
      65      70      75      80
Ser Ser Met Val Ser Arg Lys Asn Lys Ile Arg Arg Asn Arg Gln Leu
      85      90      95
Glu Arg Leu Ala Ser His Ile Lys Glu Leu Glu Pro Lys Leu Lys Lys
      100      105      110
Ile Leu Gln Met Asn Pro Arg Met Arg Lys Phe Gln Val Asp Met Thr
      115      120      125
Leu Asp Ala Asn Thr Ala Asn Asn Phe Leu Leu Ile Ser Asp Asp Leu
      130      135      140
Arg Ser Val Arg Ser Gly Arg Ile Arg Gln Asn Arg Gln Asp Leu Ala
      145      150      155      160
Glu Arg Phe Asp Val Ser Val Cys Ile Leu Gly Ser Pro Arg Phe Thr
      165      170      175
Cys Gly Arg His Cys Trp Glu Val Asp Val Gly Thr Ser Thr Glu Trp
      180      185      190
Asp Leu Gly Val Cys Arg Glu Ser Val His Arg Lys Gly Arg Ile Gln
      195      200      205
Leu Thr Thr Glu Leu Gly Phe Trp Thr Val Ser Leu Arg Asp Gly Gly
      210      215      220
Arg Leu Ser Ala Ser Thr Val Pro Leu Thr Phe Leu Phe Val Asp Arg
      225      230      235      240
Lys Leu Gln Arg Val Gly Ile Phe Leu Asp Met Gly Met Gln Asn Val
      245      250      255
Ser Phe Phe Asp Ala Glu Gly Gly Ser His Val Tyr Thr Phe Arg Ser
      260      265      270

```

Val Ser Ala Glu Glu Pro Leu Cys Pro Phe Leu Ala Pro Ser Ile Pro
 275 280 285
 Pro Asn Gly Asp Gln Gly Val Leu Ser Ile Cys Pro Leu Met Asn Ser
 290 295 300
 Gly Thr Thr Asp Ala Pro Val Arg Pro Gly Glu Ala Lys *
 305 310 315 317

<210> 429
 <211> 213
 <212> PRT
 <213> Homo sapiens

<400> 429
 Met Tyr Arg Leu Ser Ser Ser Met Leu Leu Arg Ala Leu Ala Gln Ala
 1 5 10 15
 Met Arg Thr Gly His Leu Ile Gly Gln Ser Leu His Ser Ser Ala Val
 20 25 30
 Ala Ala Thr Tyr Lys Tyr Val Asn Lys Lys Glu Gln Glu Ser Glu Val
 35 40 45
 Asp Met Lys Ser Glu Thr Asp Asn Ala Ala Arg Ile Leu Met Trp Thr
 50 55 60
 Glu Leu Ile Arg Gly Leu Gly Met Thr Leu Arg Tyr Leu Phe Arg Glu
 65 70 75 80
 Pro Ala Thr Ile Asn Tyr Pro Phe Glu Lys Gly Pro Leu Ser Pro Arg
 85 90 95
 Phe Arg Gly Glu His Ala Leu Arg Arg Tyr Pro Ser Gly Glu Glu Arg
 100 105 110
 Cys Ile Ala Cys Lys Leu Cys Glu Ala Ile Cys Pro Ala Gln Ala Ile
 115 120 125
 Thr Ile Glu Ala Glu Pro Arg Ala Asp Gly Ser Arg Arg Thr Thr Arg
 130 135 140
 Tyr Asp Ile Asp Met Thr Lys Cys Ile Tyr Cys Gly Phe Cys Gln Glu
 145 150 155 160
 Ala Cys Pro Val Asp Ala Ile Val Glu Gly Pro Asn Phe Glu Phe Ser
 165 170 175
 Thr Glu Thr His Glu Glu Leu Leu Tyr Asn Lys Glu Lys Leu Leu Asn
 180 185 190
 Asn Gly Asp Lys Trp Glu Ala Glu Ile Ala Ala Asn Ile Gln Ala Asp
 195 200 205
 Tyr Leu Tyr Arg *
 210 212

<210> 430
 <211> 70
 <212> PRT
 <213> Homo sapiens

<400> 430
 Met Ile Glu Leu Ala Phe Ala Ser Phe Leu Lys Cys Ala Ser Phe Ser
 1 5 10 15
 Leu Val Ile Leu Val Ser Phe Ser Phe Pro Leu Trp Phe Phe Leu Ser
 20 25 30
 Cys Phe Ala Cys Ser Tyr Ser Phe Ser Cys Leu Leu Ser Arg Ile Ser
 35 40 45
 Ile Leu Ser Pro Phe Cys His Leu Leu Pro Arg Gln Ser His Asp Leu
 50 55 60
 Cys Thr Asn Asp Leu *
 65 69

<210> 431
 <211> 63
 <212> PRT
 <213> Homo sapiens

<400> 431
 Met Ser Val Leu Ile Trp Cys Leu Ile Phe Phe Pro Leu Glu Tyr Ser
 1 5 10 15
 Arg Pro Lys Arg Gly Leu Lys Val Asp Asn Val Cys Phe Ser Thr Val
 20 25 30
 Ala Leu Ser Thr Gly Ser Arg Ile Ser Asn Trp Ser Asn Cys Glu Thr
 35 40 45
 Cys Leu Leu Ala Glu Met Phe Phe Leu Asp Leu Gly Phe Ser *
 50 55 60 62

<210> 432
 <211> 319
 <212> PRT
 <213> Homo sapiens

<400> 432
 Met Ala Ala Ala Ala Val Ser Gly Ala Leu Gly Arg Ala Gly Trp Arg
 1 5 10 15
 Leu Leu Gln Leu Arg Cys Leu Pro Val Ala Arg Cys Arg Gln Ala Leu
 20 25 30
 Val Pro Arg Ala Phe His Ala Ser Ala Val Gly Leu Arg Ser Ser Asp
 35 40 45
 Glu Gln Lys Gln Gln Pro Pro Asn Ser Phe Ser Gln Gln His Ser Glu
 50 55 60
 Thr Gln Gly Ala Glu Lys Pro Asp Pro Glu Ser Ser His Ser Pro Pro
 65 70 75 80
 Arg Tyr Thr Asp Gln Gly Gly Glu Glu Glu Asp Tyr Glu Ser Glu
 85 90 95
 Glu Gln Leu Gln His Arg Ile Leu Thr Ala Ala Leu Glu Phe Val Pro
 100 105 110
 Ala His Gly Trp Thr Ala Glu Ala Ile Ala Glu Gly Ala Gln Ser Leu
 115 120 125
 Gly Leu Ser Ser Ala Ala Ala Ser Met Phe Gly Lys Asp Gly Ser Glu
 130 135 140
 Leu Ile Leu His Phe Val Thr Gln Cys Asn Thr Arg Leu Thr Arg Val
 145 150 155 160
 Leu Glu Glu Glu Gln Lys Leu Val Gln Leu Gly Gln Ala Glu Lys Arg
 165 170 175
 Lys Thr Asp Gln Phe Leu Arg Asp Ala Val Glu Thr Arg Leu Arg Met
 180 185 190
 Leu Ile Pro Tyr Ile Glu His Trp Pro Arg Ala Leu Ser Ile Leu Met
 195 200 205
 Leu Pro His Asn Ile Pro Ser Ser Leu Ser Leu Leu Thr Ser Met Val
 210 215 220
 Asp Asp Met Trp His Tyr Ala Gly Asp Gln Ser Thr Asp Phe Asn Trp
 225 230 235 240
 Tyr Thr Arg Arg Ala Met Leu Ala Ala Ile Tyr Asn Thr Thr Glu Leu
 245 250 255
 Val Met Met Gln Asp Ser Ser Pro Asp Phe Glu Asp Thr Trp Arg Phe
 260 265 270
 Leu Glu Asn Arg Val Asn Asp Ala Met Asn Met Gly His Thr Ala Lys
 275 280 285

Gln Val Lys Ser Thr Gly Glu Ala Leu Val Gln Gly Leu Met Gly Ala
 290 295 300
 Ala Val Thr Leu Lys Asn Leu Thr Gly Leu Asn Gln Arg Arg *
 305 310 315 318

<210> 433
 <211> 56
 <212> PRT
 <213> Homo sapiens

<400> 433
 Met Gly His Leu Leu Cys Val Trp Gly Phe Thr Tyr Ile Leu Pro Cys
 1 5 10 15
 Ile Ser Leu Arg His Ser Pro Leu Gln Pro Pro Gly Trp Glu Gly Phe
 20 25 30
 Cys Arg Asn Val Ser Phe Pro Leu Leu Arg Ala Ser Leu Ala Pro His
 35 40 45
 His Arg Arg Lys Asp Gly Phe Ile
 50 55 56

<210> 434
 <211> 84
 <212> PRT
 <213> Homo sapiens

<400> 434
 Met His Val Leu Ile Arg Thr Pro Cys Ser Leu Ile Leu Cys Leu Ala
 1 5 10 15
 Asn Ser Ser His Ala Ser Leu Pro Gly Phe Ser Ala Ser Ser Phe Leu
 20 25 30
 Phe Lys Glu Ser Cys Arg Leu Leu Leu Asn Ser Ser Phe Leu Leu His
 35 40 45
 Gly Leu Glu Ile Leu Ser Gly Ala Ile Ala Gly Lys Cys Asn Ser Phe
 50 55 60
 Cys Leu Phe Ser Ile Ser Gln Gly Ser Leu Ser Phe Asn Ala Ser Cys
 65 70 75 80
 Pro Leu Pro *
 83

<210> 435
 <211> 142
 <212> PRT
 <213> Homo sapiens

<400> 435
 Met Ala Arg Pro Thr Ser Ser Leu Cys Leu Leu Leu Tyr Phe Phe Ser
 1 5 10 15
 Thr Gly Lys Ser Val Pro Val Ser Ile Leu Pro Gly Val Val Arg Met
 20 25 30
 Leu Leu Pro Pro Pro His Leu Leu Pro Gly Gln Pro Ala Cys Pro
 35 40 45
 Ala Ala Val Met Cys Asp Lys Glu Phe Met Trp Ala Leu Lys Asn Gly
 50 55 60
 Asp Leu Asp Glu Val Lys Asp Tyr Val Ala Lys Gly Glu Asp Val Asn
 65 70 75 80

Arg Thr Leu Glu Gly Gly Arg Lys Pro Leu His Tyr Ala Ala Asp Cys
 85 90 95
 Gly Gln Leu Glu Ile Leu Glu Phe Leu Leu Leu Lys Gly Ala Asp Ile
 100 105 110
 Asn Ala Pro Asp Lys His His Ile Thr Pro Leu Leu Ser Ala Val Tyr
 115 120 125
 Glu Gly His Val Ser Cys Val Lys Leu Leu Leu Ser Lys *
 130 135 140 141

<210> 436
 <211> 50
 <212> PRT
 <213> Homo sapiens

<400> 436
 Met Ser Leu Lys Ser Lys Lys Ser Lys Thr Ser Cys Ile Tyr Met Phe
 1 5 10 15
 Trp Ser Cys Leu Ile Gly Phe Phe Phe Leu Leu Thr Tyr Pro Pro Leu
 20 25 30
 Asn Pro Tyr Leu Pro Arg Ser Ser Pro Ser Cys Lys Trp His Gln Cys
 35 40 45
 Pro Ser
 50

<210> 437
 <211> 91
 <212> PRT
 <213> Homo sapiens

<400> 437
 Met Phe Leu Val Phe Cys Asn Ile Ile Thr Val Ile Thr Met Thr Ser
 1 5 10 15
 Leu Phe Leu Ile Leu Leu Ser Cys Ile Phe Ile Leu Ile Thr Cys Cys
 20 25 30
 Tyr Lys Cys Arg Tyr Ile Ser Phe Ser Phe Thr Phe Ser Val Thr Pro
 35 40 45
 Ser Gly Phe Phe Val Ser Ile Leu Gln Tyr Leu Ala His Ile Leu Leu
 50 55 60
 Leu Ile Thr Leu Gln Phe His Phe Arg Val Cys Tyr Val Asn Ile Ile
 65 70 75 80
 Thr Leu Ile Pro Leu Ala Gln Ile Phe Leu *
 85 90

<210> 438
 <211> 83
 <212> PRT
 <213> Homo sapiens

<400> 438
 Met Glu Asn Asn Leu Ile Leu Thr Cys Trp Gly Arg Cys Ala Ala His
 1 5 10 15
 Pro Val Glu Leu Met Gly Val Thr Ala Lys Thr Lys Val Lys Pro Leu
 20 25 30
 Leu Pro Arg Ala Gln Lys Gln Arg Glu Glu Gln Gly Lys Phe Lys Phe
 35 40 45

Lys Lys Pro His Ser Cys Ile Lys Lys Ser Arg Asn Leu Ser Ser Arg
 50 55 60
 Leu Cys Glu Asn Tyr Val Cys Trp Lys Leu Val Ser Ser Pro Arg Leu
 65 70 75 80
 Gly Gln Lys
 83

<210> 439
 <211> 77
 <212> PRT
 <213> Homo sapiens

<400> 439
 Met Leu Met Val Leu Lys Leu Val Ile Cys Ser Ile Phe Ile Gly Lys
 1 5 10 15
 Glu Gly His Phe Val Ile Ser Tyr Leu Pro Ser Phe Ser Leu Asn Ile
 20 25 30
 Gln Asp Thr Leu Lys Ser Val His Gln Pro Cys Ser Ala Leu Ser Gly
 35 40 45
 Tyr Asn Met Pro Glu Lys Pro Glu Glu Cys Ser Ile Lys Glu Arg His
 50 55 60
 Pro Tyr Ser Gln Arg Leu Phe Leu Glu Phe Lys Val *
 65 70 75 76

<210> 440
 <211> 97
 <212> PRT
 <213> Homo sapiens

<400> 440
 Met Gly Ile Ser Cys Lys Leu Leu Leu Leu Thr Arg Val Cys Tyr Leu
 1 5 10 15
 Ile Thr Pro Leu Asp Leu Glu Arg Phe Pro Phe Pro Asn Thr Glu Gln
 20 25 30
 Val Thr Phe Pro Glu Arg Arg Val Ser Val Phe Leu Leu Pro Leu Ser
 35 40 45
 Trp Cys Leu Asp Thr Arg Leu Pro Arg Glu Pro Gly Cys Arg Cys Arg
 50 55 60
 His Ser Ser Pro Gln Asp Val Val Gly Gly Ser His Leu Val Thr Thr
 65 70 75 80
 Thr Leu Leu Ser Leu Pro Ala Arg Glu Phe Trp Thr Ser Cys Ile Leu
 85 90 95 96
 *

<210> 441
 <211> 46
 <212> PRT
 <213> Homo sapiens

<400> 441
 Met Ile Leu Phe His Cys Glu Lys Leu Tyr Ala Leu Arg Ser Phe Asp
 1 5 10 15
 Phe Trp Phe Met Leu Glu Leu Leu Ser Thr Trp Pro Arg Ala Leu Gly
 20 25 30

Leu Leu Cys Pro Gly Leu Ala Ile Glu Ala His Glu Gly *
 35 40 45

<210> 442
 <211> 79
 <212> PRT
 <213> Homo sapiens

<400> 442
 Met Lys Thr Leu Lys Ile Phe Thr Tyr Tyr Phe Leu Ser Leu Ser Asn
 1 5 10 15
 Ile Phe Ile Leu Thr Ile Gly Leu Thr Cys Ala Ser Gly Pro Leu Asp
 20 25 30
 Phe Thr Pro Val Phe Leu Leu Gly Lys Gly Ser Leu Lys Cys Lys Tyr
 35 40 45
 Gly Pro Val Ala His Leu Pro Glu Ala Leu Glu Ser Gly Pro Gln
 50 55 60
 Ile Pro Ser Gly Cys Asn Trp Lys Glu Ile Pro Thr Ser Ser *
 65 70 75 78

<210> 443
 <211> 52
 <212> PRT
 <213> Homo sapiens

<400> 443
 Met Thr Pro Arg Glu Pro Ala Gln Glu Arg Arg Pro His Leu Glu Gly
 1 5 10 15
 Pro Thr Leu Lys Ala Ser Asp Gly Glu Thr Trp Cys Glu Leu Arg Gly
 20 25 30
 Asp Glu Met Arg Arg Ser Ser Ala Pro Cys Leu Val Gly Ser Pro Gly
 35 40 45
 Pro Thr Cys *
 50 51

<210> 444
 <211> 389
 <212> PRT
 <213> Homo sapiens

<400> 444
 Met Glu Ser Arg Met Trp Pro Ala Leu Leu Leu Ser His Leu Leu Pro
 1 5 10 15
 Leu Trp Pro Leu Leu Leu Pro Leu Pro Pro Pro Ala Gln Asp Ser
 20 25 30
 Ser Ser Ser Pro Arg Thr Pro Pro Ala Pro Ala Arg Pro Pro Cys Ala
 35 40 45
 Arg Gly Gly Pro Ser Ala Pro Arg His Val Cys Val Trp Glu Arg Ala
 50 55 60
 Pro Pro Pro Ser Arg Ser Pro Arg Val Pro Arg Ser Arg Arg Gln Val
 65 70 75 80
 Leu Pro Gly Thr Ala Pro Pro Ala Thr Pro Ser Gly Phe Glu Glu Gly
 85 90 95
 Pro Pro Ser Ser Gln Tyr Pro Trp Ala Ile Val Trp Gly Pro Thr Val
 100 105 110

```

Ser Arg Glu Asp Gly Gly Asp Pro Asn Ser Ala Asn Pro Gly Phe Leu
115 120 125
Asp Tyr Gly Phe Ala Ala Pro His Gly Leu Ala Thr Pro His Pro Asn
130 135 140
Ser Asp Ser Met Arg Gly Asp Gly Asp Gly Leu Ile Leu Gly Glu Ala
145 150 155 160
Pro Ala Thr Leu Arg Pro Phe Leu Phe Gly Gly Arg Gly Glu Gly Val
165 170 175
Asp Pro Gln Leu Tyr Val Thr Ile Thr Ile Ser Ile Ile Ile Val Leu
180 185 190
Val Ala Thr Gly Ile Ile Phe Lys Phe Cys Trp Asp Arg Ser Gln Lys
195 200 205
Arg Arg Arg Pro Ser Gly Gln Gln Gly Ala Leu Arg Gln Glu Glu Ser
210 215 220
Gln Gln Pro Leu Thr Asp Leu Ser Pro Ala Gly Val Thr Val Leu Gly
225 230 235 240
Ala Phe Gly Asp Ser Pro Thr Pro Thr Pro Asp His Glu Glu Pro Arg
245 250 255
Gly Gly Pro Arg Pro Gly Met Pro His Pro Lys Gly Ala Pro Ala Phe
260 265 270
Gln Leu Asn Arg Ser Leu Ser Gly Gln Arg Phe Leu His Thr Leu Pro
275 280 285
Leu Met Cys Val Ser Arg Pro Asp Val Val Val Val Cys Gly Val Leu
290 295 300
Thr Leu Ser Leu Met Asn Thr His Pro Pro Arg Phe Arg Ser Pro Cys
305 310 315 320
Met Leu Leu Gln Arg Trp Val Gly Gly Glu Leu Gly Ala Pro Trp Ala
325 330 335
Leu Ile Gly His Gly Leu Val Pro Phe His Thr Ile Cys Phe Ser Val
340 345 350
Ser Pro Ser Tyr Ser Lys Asp Ala Gly Ile Thr Leu Arg Ala Pro Pro
355 360 365
Trp Glu Trp Gly Ser Glu Ala Pro Asp Phe Thr Pro Ser Pro Leu Leu
370 375 380
Lys Ser Val Phe *
385 388

```

<210> 445

<211> 338

<212> PRT

<213> Homo sapiens

<400> 445

```

Met Asp Phe Leu Val Leu Phe Leu Phe Tyr Leu Ala Ser Val Leu Met
1 5 10 15
Gly Leu Val Leu Ile Cys Val Cys Ser Lys Thr His Ser Leu Lys Gly
20 25 30
Leu Ala Arg Gly Gly Ala Gln Ile Phe Ser Cys Ile Ile Pro Glu Cys
35 40 45
Leu Gln Arg Ala Met His Gly Leu Leu His Tyr Leu Phe His Thr Arg
50 55 60
Asn His Thr Phe Ile Val Leu His Leu Val Leu Gln Gly Met Val Tyr
65 70 75 80
Thr Glu Tyr Thr Trp Glu Val Phe Gly Tyr Cys Gln Glu Leu Glu Leu
85 90 95
Ser Leu His Tyr Leu Leu Leu Pro Tyr Leu Leu Leu Gly Val Asn Leu
100 105 110
Phe Phe Phe Thr Leu Thr Cys Gly Thr Asn Pro Gly Ile Ile Thr Lys
115 120 125
Ala Asn Glu Leu Leu Phe Leu His Val Tyr Glu Phe Asp Glu Val Met
130 135 140

```

Phe Pro Lys Asn Val Arg Cys Ser Thr Cys Asp Leu Arg Lys Pro Ala
 145 150 155 160
 Arg Ser Lys His Cys Ser Val Cys Asn Trp Cys Val His Arg Phe Asp
 165 170 175
 His His Cys Val Trp Val Asn Asn Cys Ile Gly Ala Trp Asn Ile Arg
 180 185 190
 Tyr Phe Leu Ile Tyr Val Leu Thr Leu Thr Ala Ser Ala Ala Thr Val
 195 200 205
 Ala Ile Val Ser Thr Thr Phe Leu Val His Leu Val Val Met Ser Asp
 210 215 220
 Leu Tyr Gln Glu Thr Tyr Ile Asp Asp Leu Gly His Leu His Val Met
 225 230 235 240
 Asp Thr Val Phe Leu Ile Gln Tyr Leu Phe Leu Thr Phe Pro Arg Ile
 245 250 255
 Val Phe Met Leu Gly Phe Val Val Val Leu Ser Phe Leu Leu Gly Gly
 260 265 270
 Tyr Leu Leu Phe Val Leu Tyr Leu Ala Ala Thr Asn Gln Thr Thr Asn
 275 280 285
 Glu Trp Tyr Arg Gly Asp Trp Ala Trp Cys Gln Arg Cys Pro Leu Val
 290 295 300
 Ala Trp Ala Ser Val Ser Arg Ala Pro Ser Pro Glu His Ser Leu
 305 310 315 320
 Pro Trp Ala Ser Glu Gln Pro Ser Arg Asp Leu Ser Thr Cys Leu Ser
 325 330 335
 Met Ser
 338

<210> 446
 <211> 139
 <212> PRT
 <213> Homo sapiens

<400> 446
 Met Lys Val Arg Arg Gly Ser Ser Ser Ser Leu Thr His Arg Pro Ala
 1 5 10 15
 Pro Ser Pro Ala Thr Pro Arg Leu Leu Gly Thr Arg Arg Val Leu Leu
 20 25 30
 Gly Val Ser Glu Gly Thr Gly Cys Ala Asp Ala Met Glu Leu Val Leu
 35 40 45
 Val Phe Leu Cys Ser Leu Leu Ala Pro Met Val Leu Ala Ser Ala Ala
 50 55 60
 Glu Lys Glu Lys Glu Met Asp Pro Phe His Tyr Asp Tyr Gln Thr Leu
 65 70 75 80
 Arg Ile Gly Gly Leu Val Phe Ala Val Val Leu Phe Ser Val Gly Ile
 85 90 95
 Leu Leu Ile Leu Ser Arg Arg Cys Lys Cys Ser Phe Asn Gln Lys Pro
 100 105 110
 Arg Ala Pro Gly Asp Glu Glu Ala Gln Val Glu Asn Leu Ile Thr Ala
 115 120 125
 Asn Ala Thr Glu Pro Gln Lys Ala Glu Asn *
 130 135 138

<210> 447
 <211> 383
 <212> PRT
 <213> Homo sapiens

<400> 447

```

Met Leu Arg Trp Thr Val His Leu Glu Gly Gly Pro Arg Arg Val Asn
 1           5           10           15
His Ala Ala Val Ala Val Gly His Arg Val Tyr Ser Phe Gly Gly Tyr
      20           25           30
Cys Ser Gly Glu Asp Tyr Glu Thr Leu Arg Gln Ile Asp Val His Ile
      35           40           45
Phe Asn Ala Val Ser Leu Arg Trp Thr Lys Leu Pro Pro Val Lys Ser
      50           55           60
Ala Ile Arg Gly Gln Ala Pro Val Val Pro Tyr Met Arg Tyr Gly His
      65           70           75           80
Ser Thr Val Leu Ile Asp Asp Thr Val Leu Leu Trp Gly Gly Arg Asn
      85           90           95
Asp Thr Glu Gly Ala Cys Asn Val Leu Tyr Ala Phe Asp Val Asn Thr
      100          105          110
His Lys Trp Phe Thr Pro Arg Val Ser Gly Thr Val Pro Gly Ala Arg
      115          120          125
Asp Gly His Ser Ala Cys Val Leu Gly Lys Ile Met Tyr Ile Phe Gly
      130          135          140
Gly Tyr Glu Gln Gln Ala Asp Cys Phe Ser Asn Asp Ile His Lys Leu
      145          150          155          160
Asp Thr Ser Thr Met Thr Trp Thr Leu Ile Cys Thr Lys Gly Ser Pro
      165          170          175
Ala Arg Trp Arg Asp Phe His Ser Ala Thr Met Leu Gly Ser His Met
      180          185          190
Tyr Val Phe Gly Gly Arg Ala Asp Arg Phe Gly Pro Phe His Ser Asn
      195          200          205
Asn Glu Ile Tyr Cys Asn Arg Ile Arg Val Phe Asp Thr Arg Thr Glu
      210          215          220
Ala Trp Leu Asp Cys Pro Pro Thr Pro Val Leu Pro Glu Gly Arg Arg
      225          230          235          240
Ser His Ser Ala Phe Gly Tyr Asn Gly Glu Leu Tyr Ile Phe Gly Gly
      245          250          255
Tyr Asn Ala Arg Leu Asn Arg His Phe His Asp Leu Trp Lys Phe Asn
      260          265          270
Pro Val Ser Phe Thr Trp Lys Lys Ile Glu Pro Lys Gly Lys Gly Pro
      275          280          285
Cys Pro Arg Arg Arg Gln Cys Cys Cys Ile Val Gly Asp Lys Ile Val
      290          295          300
Leu Phe Gly Gly Thr Ser Pro Ser Pro Glu Glu Gly Leu Gly Asp Glu
      305          310          315          320
Phe Asp Leu Ile Asp His Ser Asp Leu His Ile Leu Asp Phe Ser Pro
      325          330          335
Ser Leu Lys Thr Leu Cys Lys Leu Ala Val Ile Gln Tyr Asn Leu Asp
      340          345          350
Gln Ser Cys Leu Pro His Asp Ile Arg Trp Glu Leu Asn Ala Met Thr
      355          360          365
Thr Asn Ser Asn Ile Ser Arg Pro Ile Val Ser Ser His Gly *
      370          375          380          382

```

<210> 448

<211> 429

<212> PRT

<213> Homo sapiens

<400> 448

```

Met Ala Glu Asn Asp Val Asp Asn Glu Leu Leu Asp Tyr Glu Asp Asp
 1           5           10           15
Glu Val Glu Thr Ala Ala Gly Gly Asp Gly Ala Glu Ala Pro Ala Lys
      20           25           30
Lys Asp Val Lys Gly Ser Tyr Val Ser Ile His Ser Ser Gly Phe Arg
      35           40           45

```

```

Asp Phe Leu Leu Lys Pro Glu Leu Leu Arg Ala Ile Val Asp Cys Gly
  50          55          60
Phe Glu His Pro Ser Glu Val Gln His Glu Cys Ile Pro Gln Ala Ile
  65          70          75          80
Leu Gly Met Asp Val Leu Cys Gln Ala Lys Ser Gly Met Gly Lys Thr
          85          90          95
Ala Val Phe Val Leu Ala Thr Leu Gln Gln Leu Glu Pro Val Thr Gly
          100          105          110
Gln Val Ser Val Leu Val Met Cys His Thr Arg Glu Leu Ala Phe Gln
          115          120          125
Ile Ser Lys Glu Tyr Glu Arg Phe Ser Lys Tyr Met Pro Asn Val Lys
          130          135          140
Val Ala Val Phe Phe Gly Gly Leu Ser Ile Lys Lys Asp Glu Glu Val
          145          150          155          160
Leu Lys Lys Asn Cys Pro His Ile Val Val Gly Thr Pro Gly Arg Ile
          165          170          175
Leu Ala Leu Ala Arg Asn Lys Ser Leu Asn Leu Lys His Ile Lys His
          180          185          190
Phe Ile Leu Asp Glu Cys Asp Lys Met Leu Glu Gln Leu Asp Met Arg
          195          200          205
Arg Asp Val Gln Glu Ile Phe Arg Met Thr Pro His Glu Lys Gln Val
          210          215          220
Met Met Phe Ser Ala Thr Leu Ser Lys Glu Ile Arg Pro Val Cys Arg
          225          230          235          240
Lys Phe Met Gln Asp Pro Met Glu Ile Phe Val Asp Asp Glu Thr Lys
          245          250          255
Leu Thr Leu His Gly Leu Gln Gln Tyr Tyr Val Lys Leu Lys Asp Asn
          260          265          270
Glu Lys Asn Arg Lys Leu Phe Asp Leu Leu Asp Val Leu Glu Phe Asn
          275          280          285
Gln Val Val Ile Phe Val Lys Ser Val Gln Arg Cys Ile Ala Leu Ala
          290          295          300
Gln Leu Leu Val Glu Gln Asn Phe Pro Ala Ile Ala Ile His Arg Gly
          305          310          315          320
Met Pro Gln Glu Glu Arg Leu Ser Arg Tyr Gln Gln Phe Lys Asp Phe
          325          330          335
Gln Arg Arg Ile Leu Val Ala Thr Asn Leu Phe Gly Arg Gly Met Asp
          340          345          350
Ile Glu Arg Val Asn Ile Ala Phe Asn Tyr Asp Met Pro Glu Asp Ser
          355          360          365
Asp Thr Tyr Leu His Arg Val Ala Arg Ala Gly Arg Phe Gly Thr Lys
          370          375          380
Gly Leu Ala Ile Thr Phe Val Ser Asp Glu Asn Asp Ala Lys Ile Leu
          385          390          395          400
Asn Asp Val Gln Asp Arg Phe Glu Val Asn Ile Ser Glu Leu Pro Asp
          405          410          415
Glu Ile Asp Ile Ser Ser Tyr Ile Glu Gln Thr Arg *
          420          425          428

```

<210> 449

<211> 403

<212> PRT

<213> Homo sapiens

<400> 449

```

Met Ala Glu Asn Asp Val Asp Asn Glu Leu Leu Asp Tyr Glu Asp Asp
  1          5          10          15
Glu Val Glu Thr Ala Ala Gly Gly Asp Gly Ala Glu Ala Pro Ala Lys
          20          25          30
Lys Asp Val Lys Gly Ser Tyr Val Ser Ile His Ser Ser Gly Phe Arg
          35          40          45

```

Asp Phe Leu Leu Lys Pro Glu Leu Leu Arg Ala Ile Val Asp Cys Gly
 50 55 60
 Phe Glu His Pro Ser Glu Val Gln His Glu Cys Ile Pro Gln Ala Ile
 65 70 75 80
 Leu Gly Met Asp Val Leu Cys Gln Ala Lys Ser Gly Met Gly Lys Thr
 85 90 95
 Ala Val Phe Val Leu Ala Thr Leu Gln Gln Leu Glu Pro Val Thr Gly
 100 105 110
 Gln Val Ser Val Leu Val Met Cys His Thr Arg Glu Leu Ala Phe Gln
 115 120 125
 Ile Ser Lys Glu Tyr Glu Arg Phe Ser Lys Tyr Met Pro Asn Val Lys
 130 135 140
 Val Ala Val Phe Phe Gly Glu Ser Ile Lys Lys Asp Glu Glu Val
 145 150 155 160
 Leu Lys Lys Asn Cys Pro His Ile Val Val Gly Thr Pro Gly Arg Ile
 165 170 175
 Leu Ala Leu Ala Arg Asn Lys Ser Leu Asn Leu Lys His Ile Lys His
 180 185 190
 Phe Ile Leu Asp Glu Cys Asp Lys Met Leu Glu Gln Leu Asp Met Arg
 195 200 205
 Arg Asp Val Gln Glu Ile Phe Arg Met Thr Pro His Glu Lys Gln Val
 210 215 220
 Met Met Phe Ser Ala Thr Leu Ser Lys Glu Ile Arg Pro Val Cys Arg
 225 230 235 240
 Lys Phe Met Gln Asp Pro Met Glu Ile Phe Val Asp Asp Glu Thr Lys
 245 250 255
 Leu Thr Leu His Gly Leu Gln Gln Tyr Tyr Val Lys Leu Lys Asp Asn
 260 265 270
 Glu Lys Asn Arg Lys Leu Phe Asp Leu Leu Asp Val Leu Glu Phe Asn
 275 280 285
 Gln Val Val Ile Phe Val Lys Ser Val Gln Arg Cys Ile Ala Leu Ala
 290 295 300
 Gln Gln Phe Lys Asp Phe Gln Arg Arg Ile Leu Val Ala Thr Asn Leu
 305 310 315 320
 Phe Gly Arg Gly Met Asp Ile Glu Arg Val Asn Ile Ala Phe Asn Tyr
 325 330 335
 Asp Met Pro Glu Asp Ser Asp Thr Tyr Leu His Arg Val Ala Arg Ala
 340 345 350
 Gly Arg Phe Gly Thr Lys Gly Leu Ala Ile Thr Phe Val Ser Asp Glu
 355 360 365
 Asn Asp Ala Lys Ile Leu Asn Asp Val Gln Asp Arg Phe Glu Val Asn
 370 375 380
 Ile Ser Glu Leu Pro Asp Glu Ile Asp Ile Ser Ser Tyr Ile Glu Gln
 385 390 395 400
 Thr Arg *
 402

<210> 450

<211> 352

<212> PRT

<213> Homo sapiens

<400> 450

Met Arg Ser Leu Gly Ala Leu Leu Leu Leu Leu Ser Ala Cys Leu Ala
 1 5 10 15
 Val Ser Ala Gly Pro Val Pro Thr Pro Pro Asp Asn Ile Gln Val Gln
 20 25 30
 Glu Asn Phe Asn Ile Ser Arg Ile Tyr Gly Lys Trp Tyr Asn Leu Ala
 35 40 45
 Ile Gly Ser Thr Cys Pro Trp Leu Lys Lys Ile Met Asp Arg Met Thr
 50 55 60

```

Val Ser Thr Leu Val Leu Gly Glu Gly Ala Thr Glu Ala Glu Ile Ser
65      70      75      80
Met Thr Ser Thr Arg Trp Arg Lys Gly Val Cys Glu Glu Thr Ser Gly
      85      90      95
Ala Tyr Glu Lys Thr Asp Thr Asp Gly Lys Phe Leu Tyr His Lys Ser
      100      105      110
Lys Trp Asn Ile Thr Met Glu Ser Tyr Val Val His Thr Asn Tyr Asp
      115      120      125
Glu Tyr Ala Ile Phe Leu Thr Lys Lys Phe Ser Arg His His Gly Pro
      130      135      140
Thr Ile Thr Ala Lys Leu Tyr Gly Arg Ala Pro Gln Leu Arg Glu Thr
145      150      155      160
Leu Leu Gln Asp Phe Arg Val Val Ala Gln Gly Val Gly Ile Pro Glu
      165      170      175
Asp Ser Ile Phe Thr Met Ala Asp Arg Gly Glu Cys Val Pro Gly Glu
      180      185      190
Gln Glu Pro Glu Pro Ile Leu Ile Pro Arg Val Arg Arg Ala Val Leu
      195      200      205
Pro Gln Glu Glu Glu Gly Ser Gly Gly Gly Gln Leu Val Thr Glu Val
      210      215      220
Thr Lys Lys Glu Asp Ser Cys Gln Leu Gly Tyr Ser Ala Gly Pro Cys
225      230      235      240
Met Gly Met Thr Ser Arg Tyr Phe Tyr Asn Gly Thr Ser Met Ala Cys
      245      250      255
Glu Thr Phe Gln Tyr Gly Gly Cys Met Gly Asn Gly Asn Asn Phe Val
      260      265      270
Thr Glu Lys Glu Cys Leu Gln Thr Cys Arg Thr Val Ala Ala Cys Asn
      275      280      285
Leu Pro Ile Val Arg Gly Pro Cys Arg Ala Phe Ile Gln Leu Trp Ala
      290      295      300
Phe Asp Ala Val Lys Gly Lys Cys Val Leu Phe Pro Tyr Gly Gly Cys
305      310      315      320
Gln Gly Asn Gly Asn Lys Phe Tyr Ser Glu Lys Glu Cys Arg Glu Tyr
      325      330      335
Cys Gly Val Pro Gly Asp Gly Asp Glu Glu Leu Leu Arg Phe Ser Asn
      340      345      350      352

```

<210> 451
 <211> 456
 <212> PRT
 <213> Homo sapiens

```

<400> 451
Met Phe Leu Leu Leu Pro Phe Asp Ser Leu Ile Val Asn Leu Leu Gly
1      5      10      15
Ile Ser Leu Thr Val Leu Phe Thr Leu Leu Leu Val Phe Ile Ile Val
      20      25      30
Pro Ala Ile Phe Gly Val Ser Phe Gly Ile Arg Lys Leu Tyr Met Lys
      35      40      45
Ser Leu Leu Lys Ile Phe Ala Trp Ala Thr Leu Arg Met Glu Arg Gly
      50      55      60
Ala Lys Glu Lys Asn His Gln Leu Tyr Lys Pro Tyr Thr Asn Gly Ile
65      70      75      80
Ile Ala Lys Asp Pro Thr Ser Leu Glu Glu Glu Ile Lys Glu Ile Arg
      85      90      95
Arg Ser Gly Ser Ser Lys Ala Leu Asp Asn Thr Pro Glu Phe Glu Leu
      100      105      110
Ser Asp Ile Phe Tyr Phe Cys Arg Lys Gly Met Glu Thr Ile Met Asp
      115      120      125

```

Asp Glu Val Thr Lys Arg Phe Ser Ala Glu Glu Leu Glu Ser Trp Asn
 130 135 140
 Leu Leu Ser Arg Thr Asn Tyr Asn Phe Gln Tyr Ile Ser Leu Arg Leu
 145 150 155 160
 Thr Val Leu Trp Gly Leu Gly Val Leu Ile Arg Tyr Cys Phe Leu Leu
 165 170 175
 Pro Leu Arg Ile Ala Leu Ala Phe Thr Gly Ile Ser Leu Leu Val Val
 180 185 190
 Gly Thr Thr Val Val Gly Tyr Leu Pro Asn Gly Arg Phe Lys Glu Phe
 195 200 205
 Met Ser Lys His Val His Leu Met Cys Tyr Arg Ile Cys Val Arg Ala
 210 215 220
 Leu Thr Ala Ile Ile Thr Tyr His Asp Arg Glu Asn Arg Pro Arg Asn
 225 230 235 240
 Gly Gly Ile Cys Val Ala Asn His Thr Ser Pro Ile Asp Val Ile Ile
 245 250 255
 Leu Ala Ser Asp Gly Tyr Tyr Ala Met Val Gly Gln Val His Gly Gly
 260 265 270
 Leu Met Gly Val Ile Gln Arg Ala Met Val Lys Ala Cys Pro His Val
 275 280 285
 Trp Phe Glu Arg Ser Glu Val Lys Asp Arg His Leu Val Ala Lys Arg
 290 295 300
 Leu Thr Glu His Val Gln Asp Lys Ser Lys Leu Pro Ile Leu Ile Phe
 305 310 315 320
 Pro Glu Gly Thr Cys Ile Asn Asn Thr Ser Val Met Met Phe Lys Lys
 325 330 335
 Gly Ser Phe Glu Ile Gly Ala Thr Val Tyr Pro Val Ala Ile Lys Tyr
 340 345 350
 Asp Pro Gln Phe Gly Asp Ala Phe Trp Asn Ser Ser Lys Tyr Gly Met
 355 360 365
 Val Thr Tyr Leu Leu Arg Met Met Thr Ser Trp Ala Ile Val Cys Ser
 370 375 380
 Val Trp Tyr Leu Pro Pro Met Thr Arg Glu Ala Asp Glu Asp Ala Val
 385 390 395 400
 Gln Phe Ala Asn Arg Val Lys Ser Ala Ile Ala Arg Gln Gly Gly Leu
 405 410 415
 Val Asp Leu Leu Trp Asp Gly Gly Leu Lys Arg Glu Lys Val Lys Asp
 420 425 430
 Thr Phe Lys Glu Glu Gln Gln Lys Leu Tyr Ser Lys Met Ile Val Gly
 435 440 445
 Asn His Lys Asp Arg Ser Arg Ser
 450 455 456

<210> 452

<211> 468

<212> PRT

<213> Homo sapiens

<400> 452

Met Leu Leu Leu Leu Leu Leu Pro Leu Leu Trp Gly Arg Glu Arg Val
 1 5 10 15
 Glu Gly Gln Lys Ser Asn Arg Lys Asp Tyr Ser Leu Thr Met Gln Ser
 20 25 30
 Ser Val Thr Val Gln Glu Gly Met Cys Val His Val Arg Cys Ser Phe
 35 40 45
 Ser Tyr Pro Val Asp Ser Gln Thr Asp Ser Asp Pro Val His Gly Tyr
 50 55 60
 Trp Phe Arg Ala Gly Asn Asp Ile Ser Trp Lys Ala Pro Val Ala Thr
 65 70 75 80
 Asn Asn Pro Ala Trp Ala Val Gln Glu Glu Thr Arg Asp Arg Phe His
 85 90 95


```

Leu Leu Gly Asp Pro Gln Thr Lys Asn Cys Thr Leu Ser Ile Arg Asp
100 105 110
Ala Arg Met Ser Asp Ala Gly Arg Tyr Phe Phe Arg Met Glu Lys Gly
115 120 125
Asn Ile Lys Trp Asn Tyr Lys Tyr Asp Gln Leu Ser Val Asn Val Thr
130 135 140
Ala Leu Thr His Arg Pro Asn Ile Leu Ile Pro Gly Thr Leu Glu Ser
145 150 155 160
Gly Cys Phe Gln Asn Leu Thr Cys Ser Val Pro Trp Ala Cys Glu Gln
165 170 175
Gly Thr Pro Pro Met Ile Ser Trp Met Gly Thr Ser Val Ser Pro Leu
180 185 190
His Pro Ser Thr Thr Arg Ser Ser Val Leu Thr Leu Ile Pro Gln Pro
195 200 205
Gln His His Gly Thr Ser Leu Thr Cys Gln Val Thr Leu Pro Gly Ala
210 215 220
Gly Val Thr Thr Asn Arg Thr Ile Gln Leu Asn Val Ser Tyr Pro Pro
225 230 235 240
Gln Asn Leu Thr Val Thr Val Phe Gln Gly Glu Gly Thr Ala Ser Thr
245 250 255
Ala Leu Gly Asn Ser Ser Ser Leu Ser Val Leu Glu Gly Gln Ser Leu
260 265 270
Arg Leu Val Cys Ala Val Asp Ser Asn Pro Pro Ala Arg Leu Ser Trp
275 280 285
Thr Trp Arg Ser Leu Thr Leu Tyr Pro Ser Gln Pro Ser Asn Pro Leu
290 295 300
Val Leu Glu Leu Gln Val His Leu Gly Asp Glu Gly Glu Phe Thr Cys
305 310 315 320
Arg Ala Gln Asn Ser Leu Gly Ser Gln His Val Ser Leu Asn Leu Ser
325 330 335
Leu Gln Gln Glu Tyr Thr Gly Lys Met Arg Pro Val Ser Gly Val Leu
340 345 350
Leu Gly Ala Val Gly Gly Ala Gly Ala Thr Ala Leu Val Phe Leu Ser
355 360 365
Phe Cys Val Ile Phe Ile Val Val Arg Ser Cys Arg Lys Lys Ser Ala
370 375 380
Arg Pro Ala Ala Asp Val Gly Asp Ile Gly Met Lys Asp Ala Asn Thr
385 390 395 400
Ile Arg Gly Ser Ala Ser Gln Gly Asn Leu Thr Glu Ser Trp Ala Asp
405 410 415
Asp Asn Pro Arg His His Gly Leu Ala Ala His Ser Ser Gly Glu Glu
420 425 430
Arg Glu Ile Gln Tyr Ala Pro Leu Ser Phe His Lys Gly Glu Pro Gln
435 440 445
Asp Leu Ser Gly Gln Glu Ala Thr Asn Asn Glu Tyr Ser Glu Ile Lys
450 455 460
Ile Pro Lys *
465 467

```

<210> 453

<211> 375

<212> PRT

<213> Homo sapiens

<400> 453

```

Met Leu Leu Leu Leu Leu Pro Leu Leu Trp Gly Arg Glu Arg Val
1 5 10 15
Glu Gly Gln Lys Ser Asn Arg Lys Asp Tyr Ser Leu Thr Met Gln Ser
20 25 30
Ser Val Thr Val Gln Glu Gly Met Cys Val His Val Arg Cys Ser Phe
35 40 45

```

Ser Tyr Pro Val Asp Ser Gln Thr Asp Ser Asp Pro Val His Gly Tyr
 50 55 60
 Trp Phe Arg Ala Gly Asn Asp Ile Ser Trp Lys Ala Pro Val Ala Thr
 65 70 75 80
 Asn Asn Pro Ala Trp Ala Val Gln Glu Glu Thr Arg Asp Arg Phe His
 85 90 95
 Leu Leu Gly Asp Pro Gln Thr Lys Asn Cys Thr Leu Ser Ile Arg Asp
 100 105 110
 Ala Arg Met Ser Asp Ala Gly Arg Tyr Phe Phe Arg Met Glu Lys Gly
 115 120 125
 Asn Ile Lys Trp Asn Tyr Lys Tyr Asp Gln Leu Ser Val Asn Val Thr
 130 135 140
 Asp Pro Pro Gln Asn Leu Thr Val Thr Val Phe Gln Gly Glu Gly Thr
 145 150 155 160
 Ala Ser Thr Ala Leu Gly Asn Ser Ser Ser Leu Ser Val Leu Glu Gly
 165 170 175
 Gln Ser Leu Arg Leu Val Cys Ala Val Asp Ser Asn Pro Pro Ala Arg
 180 185 190
 Leu Ser Trp Thr Trp Arg Ser Leu Thr Leu Tyr Pro Ser Gln Pro Ser
 195 200 205
 Asn Pro Leu Val Leu Glu Leu Gln Val His Leu Gly Asp Glu Gly Glu
 210 215 220
 Phe Thr Cys Arg Ala Gln Asn Ser Leu Gly Ser Gln His Val Ser Leu
 225 230 235 240
 Asn Leu Ser Leu Gln Gln Glu Tyr Thr Gly Lys Met Arg Pro Val Ser
 245 250 255
 Gly Val Leu Leu Gly Ala Val Gly Gly Ala Gly Ala Thr Ala Leu Val
 260 265 270
 Phe Leu Ser Phe Cys Val Ile Phe Ile Val Val Arg Ser Cys Arg Lys
 275 280 285
 Lys Ser Ala Arg Pro Ala Ala Asp Val Gly Asp Ile Gly Met Lys Asp
 290 295 300
 Ala Asn Thr Ile Arg Gly Ser Ala Ser Gln Gly Asn Leu Thr Glu Ser
 305 310 315 320
 Trp Ala Asp Asp Asn Pro Arg His His Gly Leu Ala Ala His Ser Ser
 325 330 335
 Gly Glu Glu Arg Glu Ile Gln Tyr Ala Pro Leu Ser Phe His Lys Gly
 340 345 350
 Glu Pro Gln Asp Leu Ser Gly Gln Glu Ala Thr Asn Asn Glu Tyr Ser
 355 360 365
 Glu Ile Lys Ile Pro Lys *
 370 374

<210> 454

<211> 3675

<212> PRT

<213> Homo sapiens

<400> 454

Met Ala Gly Gln Pro His Ser Pro Arg Glu Leu Leu Gly Ala Ala Gly
 1 5 10 15
 His Arg Ser Arg Arg Pro Ser Thr Glu Leu Arg Val Pro Pro Ser Pro
 20 25 30
 Ser Leu Thr Met Asp Ser Gln Tyr Glu Thr Gly His Ile Arg Lys Leu
 35 40 45
 Gln Ala Arg His Met Gln Met Gln Glu Lys Thr Phe Thr Lys Trp Ile
 50 55 60
 Asn Asn Val Phe Gln Cys Gly Gln Ala Gly Ile Lys Ile Arg Asn Leu
 65 70 75 80
 Tyr Thr Glu Leu Ala Asp Gly Ile His Leu Leu Arg Leu Leu Glu Leu
 85 90 95

```

Ile Ser Gly Glu Ala Leu Pro Pro Pro Ser Arg Gly Arg Leu Arg Val
      100      105      110
His Phe Leu Glu Asn Ser Ser Arg Ala Leu Ala Phe Leu Arg Ala Lys
      115      120      125
Val Pro Val Pro Leu Ile Gly Pro Glu Asn Ile Val Asp Gly Asp Gln
      130      135      140
Thr Leu Ile Leu Gly Leu Ile Trp Val Ile Ile Leu Arg Phe Gln Ile
145      150      155      160
Ser His Ile Ser Leu Asp Lys Glu Glu Phe Gly Ala Ser Ala Ala Leu
      165      170      175
Leu Ser Thr Lys Glu Ala Leu Leu Val Trp Cys Gln Arg Lys Thr Ala
      180      185      190
Ser Tyr Thr Asn Val Asn Ile Thr Asp Phe Ser Arg Ser Trp Ser Asp
      195      200      205
Gly Leu Gly Phe Asn Ala Leu Ile His Ala His Arg Pro Asp Leu Leu
      210      215      220
Asp Tyr Gly Ser Leu Arg Pro Asp Arg Pro Leu His Asn Leu Ala Phe
225      230      235      240
Ala Phe Leu Val Ala Glu Gln Glu Leu Gly Ile Ala Gln Leu Leu Asp
      245      250      255
Pro Glu Asp Val Ala Ala Ala Gln Pro Asp Glu Arg Ser Ile Met Thr
      260      265      270
Tyr Val Ser Leu Tyr Tyr His Tyr Cys Ser Arg Leu His Gln Gly Gln
      275      280      285
Thr Val Gln Arg Arg Leu Thr Lys Ile Leu Leu Gln Leu Gln Glu Thr
      290      295      300
Glu Leu Leu Gln Thr Gln Tyr Glu Gln Leu Val Ala Asp Leu Leu Arg
305      310      315      320
Trp Ile Ala Glu Lys Gln Met Gln Leu Glu Ala Arg Asp Phe Pro Asp
      325      330      335
Ser Leu Pro Ala Met Arg Gln Leu Leu Ala Ala Phe Thr Ile Phe Arg
      340      345      350
Thr Gln Glu Lys Pro Pro Arg Leu Gln Gln Arg Gly Ala Ala Glu Ala
      355      360      365
Leu Leu Phe Arg Leu Gln Thr Ala Leu Gln Ala Gln Asn Arg Arg Pro
      370      375      380
Phe Leu Pro His Glu Gly Leu Gly Leu Ala Glu Leu Ser Gln Cys Trp
385      390      395      400
Ala Gly Leu Glu Trp Ala Glu Ala Ala Arg Ser Gln Ala Leu Gln Gln
      405      410      415
Arg Leu Leu Gln Leu Gln Arg Leu Glu Thr Leu Ala Arg Arg Phe Gln
      420      425      430
Arg Lys Ala Ala Leu Arg Glu Ser Phe Leu Lys Asp Ala Glu Gln Val
      435      440      445
Leu Asp Gln Ala Arg Ala Pro Pro Ala Ser Leu Ala Thr Val Glu Ala
      450      455      460
Ala Val Gln Arg Leu Gly Met Leu Glu Ala Gly Ile Leu Pro Gln Glu
465      470      475      480
Gly Arg Phe Gln Ala Leu Ala Glu Ile Ala Asp Ile Leu Arg Gln Glu
      485      490      495
Gln Tyr His Ser Trp Ala Asp Val Ala Arg Arg Gln Glu Glu Val Thr
      500      505      510
Val Arg Trp Gln Arg Leu Leu Gln His Leu Gln Gly Gln Arg Lys Gln
      515      520      525
Val Ala Asp Met Gln Ala Val Leu Ser Leu Leu Gln Glu Val Glu Ala
      530      535      540
Ala Ser His Gln Leu Glu Leu Gln Glu Pro Ala Arg Ser Thr Ala
545      550      555      560
Cys Gly Gln Gln Leu Ala Glu Val Val Glu Leu Leu Gln Arg His Asp
      565      570      575
Leu Leu Glu Ala Gln Val Ser Ala His Gly Ala His Val Ser His Leu
      580      585      590
Ala Gln Gln Thr Ala Glu Leu Asp Ser Ser Leu Gly Thr Ser Val Glu
595      600      605

```

Val Leu Gln Ala Lys Ala Arg Thr Leu Ala Gln Leu Gln Gln Ser Leu
 610 615 620
 Val Ala Leu Val Arg Ala Arg Arg Ala Leu Leu Glu Gln Thr Leu Gln
 625 630 635 640
 Arg Ala Glu Phe Leu Arg Asn Cys Glu Glu Glu Glu Ala Trp Leu Lys
 645 650 655
 Glu Cys Gly Gln Arg Val Gly Asn Ala Ala Leu Gly Arg Asp Leu Ser
 660 665 670
 Gln Ile Ala Gly Ala Leu Gln Lys His Lys Ala Leu Glu Ala Glu Val
 675 680 685
 His Arg His Gln Ala Val Cys Val Asp Leu Val Arg Arg Gly Arg Asp
 690 695 700
 Leu Ser Ala Arg Arg Pro Pro Thr Gln Pro Asp Pro Gly Glu Arg Ala
 705 710 715 720
 Glu Ala Val Gln Gly Gly Trp Gln Leu Leu Gln Thr Arg Val Val Gly
 725 730 735
 Arg Gly Ala Arg Leu Gln Thr Ala Leu Leu Val Leu Gln Tyr Phe Ala
 740 745 750
 Asp Ala Ala Glu Ala Ala Ser Trp Leu Arg Glu Arg Arg Ser Ser Leu
 755 760 765
 Glu Arg Ala Ser Cys Gly Gln Asp Gln Ala Ala Ala Glu Thr Leu Leu
 770 775 780
 Arg Arg His Val Arg Leu Glu Arg Val Leu Arg Ala Phe Ala Ala Glu
 785 790 795 800
 Leu Arg Arg Leu Glu Glu Gln Gly Arg Ala Ala Ser Ala Arg Ala Ser
 805 810 815
 Leu Phe Thr Val Asn Ser Ala Leu Ser Pro Pro Gly Glu Ser Leu Arg
 820 825 830
 Asn Pro Gly Pro Trp Ser Glu Ala Ser Cys His Pro Gly Pro Gly Asp
 835 840 845
 Ala Trp Lys Met Ala Leu Pro Ala Glu Pro Asp Pro Asp Phe Asp Pro
 850 855 860
 Asn Thr Ile Leu Gln Thr Gln Asp His Leu Ser Gln Asp Tyr Glu Ser
 865 870 875 880
 Leu Arg Ala Leu Ala Gln Leu Arg Arg Ala Arg Leu Glu Glu Ala Met
 885 890 895
 Ala Leu Phe Gly Phe Cys Ser Ser Cys Gly Glu Leu Gln Leu Trp Leu
 900 905 910
 Glu Lys Gln Thr Val Leu Leu Gln Arg Val Gln Pro Gln Ala Asp Thr
 915 920 925
 Leu Glu Val Met Gln Leu Lys Tyr Glu Asn Phe Leu Thr Ala Leu Ala
 930 935 940
 Val Gly Lys Gly Leu Trp Ala Glu Val Ser Ser Ser Ala Glu Gln Leu
 945 950 955 960
 Arg Gln Arg Tyr Pro Gly Asn Ser Thr Gln Ile Gln Arg Gln Gln Glu
 965 970 975
 Glu Leu Ser Gln Arg Trp Gly Gln Leu Glu Ala Leu Lys Arg Glu Lys
 980 985 990
 Ala Val Gln Leu Ala His Ser Val Glu Val Cys Ser Phe Leu Gln Glu
 995 1000 1005
 Cys Gly Pro Thr Gln Val Gln Leu Arg Asp Val Leu Leu Gln Leu Glu
 1010 1015 1020
 Ala Leu Gln Pro Gly Ser Ser Glu Asp Thr Arg His Ala Leu Gln Leu
 1025 1030 1035 1040
 Ala Gln Lys Lys Thr Leu Val Leu Glu Arg Arg Val Tyr Phe Leu Gln
 1045 1050 1055
 Ser Val Val Val Lys Val Glu Glu Pro Gly Tyr Ala Glu Ser Gln Pro
 1060 1065 1070
 Leu Gln Gly Gln Val Glu Thr Leu Gln Gly Leu Leu Lys Gln Val Gln
 1075 1080 1085
 Glu Gln Val Ala Gln Arg Ala Arg Arg Gln Ala Glu Thr Gln Ala Arg
 1090 1095 1100
 Gln Ser Phe Leu Gln Glu Ser Gln Gln Leu Leu Trp Ala Glu Ser
 1105 1110 1115 1120

Val Gln Ala Gln Leu Arg Ser Lys Glu Val Ser Val Asp Val Ala Ser
 1125 1130 1135
 Ala Gln Arg Leu Leu Arg Glu His Gln Asp Leu Leu Glu Glu Ile His
 1140 1145 1150
 Leu Trp Gln Glu Arg Leu Gln Gln Leu Asp Ala Gln Ser Gln Pro Met
 1155 1160 1165
 Ala Ala Leu Asp Cys Pro Asp Ser Gln Glu Val Pro Asn Thr Leu Arg
 1170 1175 1180
 Val Leu Gly Gln Gln Gly Gln Glu Leu Lys Val Leu Trp Glu Gln Arg
 1185 1190 1195 1200
 Gln Gln Trp Leu Gln Glu Gly Leu Glu Leu Gln Lys Phe Gly Arg Glu
 1205 1210 1215
 Val Asp Gly Phe Thr Ala Thr Cys Ala Asn His Gln Ala Trp Leu His
 1220 1225 1230
 Leu Asp Asn Leu Gly Glu Asp Val Arg Glu Ala Leu Ser Leu Leu Gln
 1235 1240 1245
 Gln His Arg Glu Phe Gly Arg Leu Leu Ser Thr Leu Gly Pro Arg Ala
 1250 1255 1260
 Glu Ala Leu Arg Ala His Gly Glu Lys Leu Val Gln Ser Gln His Pro
 1265 1270 1275 1280
 Ala Ala His Thr Val Arg Glu Gln Leu Gln Ser Ile Gln Ala Gln Trp
 1285 1290 1295
 Thr Arg Leu Gln Gly Arg Ser Glu Gln Arg Arg Arg Gln Leu Leu Ala
 1300 1305 1310
 Ser Leu Gln Leu Gln Glu Trp Lys Gln Asp Val Ala Glu Leu Met Gln
 1315 1320 1325
 Trp Met Glu Glu Lys Gly Leu Met Ala Ala His Glu Pro Ser Gly Ala
 1330 1335 1340
 Arg Arg Asn Ile Leu Gln Thr Leu Lys Arg His Glu Ala Ala Glu Ser
 1345 1350 1355 1360
 Glu Leu Leu Ala Thr Arg Arg His Val Glu Ala Leu Gln Gln Val Gly
 1365 1370 1375
 Arg Glu Leu Leu Ser Arg Arg Pro Cys Gly Gln Glu Asp Ile Gln Thr
 1380 1385 1390
 Arg Leu Gln Gly Leu Arg Ser Lys Trp Glu Ala Leu Asn Arg Lys Met
 1395 1400 1405
 Thr Glu Arg Gly Asp Glu Leu Gln Gln Ala Gly Gln Gln Glu Gln Leu
 1410 1415 1420
 Leu Arg Gln Leu Gln Asp Ala Lys Glu Gln Leu Glu Gln Leu Glu Gly
 1425 1430 1435 1440
 Ala Leu Gln Ser Ser Glu Thr Gly Gln Asp Leu Arg Ser Ser Gln Arg
 1445 1450 1455
 Leu Gln Lys Arg His Gln Gln Leu Glu Ser Glu Ser Arg Thr Leu Ala
 1460 1465 1470
 Ala Lys Met Ala Ala Leu Ala Ser Met Ala His Gly Met Ala Ala Ser
 1475 1480 1485
 Pro Ala Ile Leu Glu Glu Thr Gln Lys His Leu Arg Arg Leu Glu Leu
 1490 1495 1500
 Leu Gln Gly His Leu Ala Ile Arg Gly Leu Gln Leu Gln Ala Ser Val
 1505 1510 1515 1520
 Glu Leu His Gln Phe Cys His Leu Ser Asn Met Glu Leu Ser Trp Val
 1525 1530 1535
 Ala Glu His Met Pro His Gly Ser Pro Thr Ser Tyr Thr Glu Cys Leu
 1540 1545 1550
 Asn Gly Ala Gln Ser Leu His Arg Lys His Lys Glu Leu Gln Val Glu
 1555 1560 1565
 Val Lys Ala His Gln Gly Gln Val Gln Arg Val Leu Ser Ser Gly Arg
 1570 1575 1580
 Ser Leu Ala Ala Ser Gly His Pro Gln Ala Gln His Ile Val Glu Gln
 1585 1590 1595 1600
 Cys Gln Glu Leu Glu Gly His Trp Ala Glu Leu Glu Arg Ala Cys Glu
 1605 1610 1615
 Ala Arg Ala Gln Cys Leu Gln Gln Ala Val Thr Phe Gln Gln Tyr Phe
 1620 1625 1630

Leu Asp Val Ser Glu Leu Glu Gly Trp Val Glu Glu Lys Arg Pro Leu
 1635 1640 1645
 Val Ser Ser Arg Asp Tyr Gly Arg Asp Glu Ala Ala Thr Leu Arg Leu
 1650 1655 1660
 Ile Asn Lys His Gln Ala Leu Gln Glu Glu Leu Ala Ile Tyr Trp Ser
 1665 1670 1675 1680
 Ser Met Glu Glu Leu Asp Gln Thr Ala Gln Thr Leu Thr Gly Pro Glu
 1685 1690 1695
 Val Pro Glu Gln Gln Arg Val Val Gln Glu Arg Leu Arg Glu Gln Leu
 1700 1705 1710
 Arg Ala Leu Gln Glu Leu Ala Ala Thr Arg Asp Arg Glu Leu Glu Gly
 1715 1720 1725
 Thr Leu Arg Leu His Glu Phe Leu Arg Glu Ala Glu Asp Leu Gln Gly
 1730 1735 1740
 Trp Leu Ala Ser Gln Lys Gln Ala Ala Lys Gly Gly Glu Ser Leu Gly
 1745 1750 1755 1760
 Glu Asp Pro Glu His Ala Leu His Leu Cys Thr Lys Phe Ala Lys Phe
 1765 1770 1775
 Gln His Gln Val Glu Met Gly Ser Gln Arg Val Ala Ala Cys Arg Leu
 1780 1785 1790
 Leu Ala Glu Ser Leu Leu Glu Arg Gly His Ser Ala Gly Pro Met Val
 1795 1800 1805
 Arg Gln Arg Gln Gln Asp Leu Gln Thr Ala Trp Ser Glu Leu Trp Glu
 1810 1815 1820
 Leu Thr Gln Ala Arg Gly His Ala Leu Arg Asp Thr Glu Thr Thr Leu
 1825 1830 1835 1840
 Arg Val His Arg Asp Leu Leu Glu Val Leu Thr Gln Val Gln Glu Lys
 1845 1850 1855
 Ala Thr Ser Leu Pro Asn Asn Val Ala Arg Asp Leu Cys Gly Leu Glu
 1860 1865 1870
 Ala Gln Leu Arg Ser His Gln Gly Leu Glu Arg Glu Leu Val Gly Thr
 1875 1880 1885
 Glu Arg Gln Leu Gln Glu Leu Glu Thr Ala Gly Arg Val Gln Lys
 1890 1895 1900
 Leu Cys Pro Gly Pro Gln Ala His Ala Val Gln Gln Arg Gln Gln Ala
 1905 1910 1915 1920
 Val Thr Gln Ala Trp Ala Val Leu Gln Arg Arg Met Glu Gln Arg Arg
 1925 1930 1935
 Ala Gln Leu Glu Arg Ala Arg Leu Leu Ala Arg Phe Arg Thr Ala Val
 1940 1945 1950
 Arg Asp Tyr Ala Ser Trp Ala Ala Arg Val Arg Gln Asp Leu Gln Val
 1955 1960 1965
 Glu Glu Ser Ser Gln Glu Pro Ser Ser Gly Pro Leu Lys Leu Ser Ala
 1970 1975 1980
 His Gln Trp Leu Arg Ala Glu Leu Glu Ala Arg Glu Lys Leu Trp Gln
 1985 1990 1995 2000
 Gln Ala Thr Gln Leu Gly Gln Gln Ala Leu Leu Ala Ala Gly Thr Pro
 2005 2010 2015
 Thr Lys Glu Val Gln Glu Glu Leu Arg Ala Leu Gln Asp Gln Arg Asp
 2020 2025 2030
 Gln Val Tyr Gln Thr Trp Ala Arg Lys Gln Glu Arg Leu Gln Ala Glu
 2035 2040 2045
 Gln Gln Glu Gln Leu Phe Leu Arg Glu Cys Gly Arg Leu Glu Glu Ile
 2050 2055 2060
 Leu Ala Ala Gln Glu Val Ser Leu Lys Thr Ser Ala Leu Gly Ser Ser
 2065 2070 2075 2080
 Val Glu Glu Val Glu Gln Leu Ile Arg Lys His Glu Val Phe Leu Lys
 2085 2090 2095
 Val Leu Thr Ala Gln Asp Lys Lys Glu Ala Ala Leu Arg Glu Arg Leu
 2100 2105 2110
 Lys Thr Leu Arg Arg Pro Arg Val Arg Asp Arg Leu Pro Ile Leu Leu
 2115 2120 2125
 Gln Arg Arg Met Arg Val Lys Glu Leu Ala Glu Ser Arg Gly His Ala
 2130 2135 2140

Leu His Ala Ser Leu Leu Met Ala Ser Phe Thr Gln Ala Ala Thr Gln
 2145 2150 2155 2160
 Ala Glu Asp Trp Ile Gln Ala Trp Ala Gln Gln Leu Lys Glu Pro Val
 2165 2170 2175
 Pro Pro Gly Asp Leu Arg Asp Lys Leu Lys Pro Leu Leu Lys His Gln
 2180 2185 2190
 Ala Phe Glu Ala Glu Val Gln Ala His Glu Glu Val Met Thr Ser Val
 2195 2200 2205
 Ala Lys Lys Gly Glu Ala Leu Leu Ala Gln Ser His Pro Arg Ala Gly
 2210 2215 2220
 Glu Val Ser Gln Arg Leu Gln Gly Leu Arg Lys His Trp Glu Asp Leu
 2225 2230 2235 2240
 Arg Gln Ala Met Ala Leu Arg Gly Gln Glu Leu Glu Asp Arg Arg Asn
 2245 2250 2255
 Phe Leu Glu Phe Leu Gln Arg Val Asp Leu Ala Glu Ala Trp Ile Gln
 2260 2265 2270
 Glu Lys Glu Val Lys Met Asn Val Gly Asp Leu Gly Gln Asp Leu Glu
 2275 2280 2285
 His Cys Leu Gln Leu Arg Arg Arg Leu Arg Glu Phe Arg Gly Asn Ser
 2290 2295 2300
 Ala Gly Asp Thr Val Gly Asp Ala Cys Ile Arg Ser Ile Ser Asp Leu
 2305 2310 2315 2320
 Ser Leu Gln Leu Lys Asn Arg Asp Pro Glu Glu Val Lys Ile Ile Cys
 2325 2330 2335
 Gln Arg Arg Ser Gln Leu Asn Asn Arg Trp Ala Ser Phe His Gly Asn
 2340 2345 2350
 Leu Leu Arg Tyr Gln Gln Gln Leu Glu Gly Ala Leu Glu Ile His Val
 2355 2360 2365
 Leu Ser Arg Glu Leu Asp Asn Val Thr Lys Arg Ile Gln Glu Lys Glu
 2370 2375 2380
 Ala Leu Ile Gln Ala Leu Asp Cys Gly Lys Asp Leu Glu Ser Val Gln
 2385 2390 2395 2400
 Arg Leu Leu Arg Lys His Glu Glu Leu Glu Arg Glu Val His Pro Ile
 2405 2410 2415
 Gln Ala Gln Val Glu Ser Leu Glu Arg Glu Val Gly Arg Leu Cys Gln
 2420 2425 2430
 Arg Ser Pro Glu Ala Ala His Gly Leu Arg His Arg Gln Gln Glu Val
 2435 2440 2445
 Ala Glu Ser Trp Trp Gln Leu Arg Ser Arg Ala Gln Lys Arg Arg Glu
 2450 2455 2460
 Ala Leu Asp Ala Leu His Gln Ala Gln Lys Leu Gln Ala Met Leu Gln
 2465 2470 2475 2480
 Glu Leu Leu Val Ser Ala Gln Arg Leu Arg Ala Gln Met Asp Thr Ser
 2485 2490 2495
 Pro Ala Pro Arg Ser Pro Val Glu Ala Arg Arg Met Leu Glu Glu His
 2500 2505 2510
 Gln Glu Cys Lys Ala Glu Leu Asp Ser Trp Thr Asp Ser Ile Ser Leu
 2515 2520 2525
 Ala Arg Ser Thr Gly Gln Gln Leu Leu Thr Ala Gly His Pro Phe Ser
 2530 2535 2540
 Ser Asp Ile Arg Gln Val Leu Ala Gly Leu Glu Gln Glu Leu Ser Ser
 2545 2550 2555 2560
 Leu Glu Gly Ala Trp Gln Glu His Gln Leu Gln Gln Ala Leu
 2565 2570 2575
 Glu Leu Gln Leu Phe Leu Ser Ser Val Glu Lys Met Glu Arg Trp Leu
 2580 2585 2590
 Cys Ser Lys Glu Asp Ser Leu Ala Ser Glu Gly Leu Trp Asp Pro Leu
 2595 2600 2605
 Ala Pro Met Glu Pro Leu Leu Trp Lys His Lys Met Leu Glu Trp Asp
 2610 2615 2620
 Leu Glu Val Gln Ala Gly Lys Ile Ser Ala Leu Glu Ala Thr Ala Arg
 2625 2630 2635 2640
 Gly Leu His Gln Gly Gly His Pro Glu Ala Gln Ser Ala Leu Gly Arg
 2645 2650 2655

Cys Gln Ala Met Leu Leu Arg Lys Glu Ala Leu Phe Arg Gln Ala Gly
 2660 2665 2670
 Thr Arg Arg His Arg Leu Glu Glu Leu Arg Gln Leu Gln Ala Phe Leu
 2675 2680 2685
 Gln Asp Ser Gln Glu Val Ala Ala Trp Leu Arg Glu Lys Asn Leu Val
 2690 2695 2700
 Ala Leu Glu Glu Gly Leu Leu Asp Thr Ala Met Leu Pro Ala Gln Leu
 2705 2710 2715 2720
 Gln Lys Gln Gln Asn Phe Gln Ala Glu Leu Asp Ala Ser Met His Gln
 2725 2730 2735
 Gln Gln Glu Leu Gln Arg Glu Gly Gln Arg Leu Leu Gln Gly Gly His
 2740 2745 2750
 Pro Ala Ser Glu Ala Ile Gln Glu Arg Leu Glu Glu Leu Gly Ala Leu
 2755 2760 2765
 Trp Gly Glu Leu Gln Asp Asn Ser Gln Lys Lys Val Ala Lys Leu Gln
 2770 2775 2780
 Lys Ala Cys Glu Ala Leu Arg Leu Arg Arg Ser Met Glu Glu Leu Glu
 2785 2790 2795 2800
 Asn Trp Leu Glu Pro Ile Glu Val Glu Leu Arg Ala Pro Thr Val Gly
 2805 2810 2815
 Gln Ala Leu Pro Gly Val Gly Glu Leu Leu Gly Thr Gln Arg Glu Leu
 2820 2825 2830
 Glu Ala Ala Val Asp Lys Lys Ala Arg Gln Ala Glu Ala Leu Leu Gly
 2835 2840 2845
 Gln Ala Glu Ala Phe Val Arg Glu Gly His Cys Leu Ala Arg Asp Val
 2850 2855 2860
 Glu Glu Gln Ala Arg Arg Leu Leu Gln Arg Phe Lys Ser Leu Arg Glu
 2865 2870 2875 2880
 Pro Leu Gln Glu Arg Arg Thr Ala Leu Glu Ala Arg Ser Leu Leu Leu
 2885 2890 2895
 Lys Phe Phe Arg Asp Ala Asp Glu Glu Met Ala Trp Val Gln Glu Lys
 2900 2905 2910
 Leu Pro Leu Ala Ala Ala Gln Asp Tyr Gly Gln Ser Leu Ser Ala Val
 2915 2920 2925
 Arg His Leu Gln Glu Gln His Gln Asn Leu Glu Ser Glu Met Ser Ser
 2930 2935 2940
 His Glu Ala Leu Thr Arg Val Val Leu Gly Thr Gly Tyr Lys Leu Val
 2945 2950 2955 2960
 Gln Ala Gly His Phe Ala Ala His Glu Val Ala Ala Arg Val Gln Gln
 2965 2970 2975
 Leu Glu Lys Ala Met Ala His Leu Arg Ala Glu Ala Ala Arg Arg Arg
 2980 2985 2990
 Leu Leu Leu Gln Gln Ala Gln Glu Ala Gln Gln Phe Leu Thr Glu Leu
 2995 3000 3005
 Leu Glu Ala Gly Ser Trp Leu Ala Glu Arg Gly His Val Leu Asp Ser
 3010 3015 3020
 Glu Asp Met Gly His Ser Ala Glu Ala Thr Gln Ala Leu Leu Arg Arg
 3025 3030 3035 3040
 Leu Glu Ala Thr Lys Arg Asp Leu Glu Ala Phe Ser Pro Arg Ile Glu
 3045 3050 3055
 Arg Leu Gln Gln Thr Ala Ala Leu Leu Glu Ser Arg Lys Asn Pro Glu
 3060 3065 3070
 Ser Pro Lys Val Leu Ala Gln Leu Gln Ala Val Arg Glu Ala His Ala
 3075 3080 3085
 Glu Leu Leu Arg Arg Ala Glu Ala Arg Gly His Gly Leu Gln Glu Gln
 3090 3095 3100
 Leu Gln Leu His Gln Leu Glu Arg Glu Thr Leu Leu Leu Asp Ala Trp
 3105 3110 3115 3120
 Leu Thr Thr Lys Ala Ala Thr Ala Glu Ser Gln Asp Tyr Gly Gln Asp
 3125 3130 3135
 Leu Glu Gly Val Lys Val Leu Glu Glu Lys Phe Asp Ala Phe Arg Lys
 3140 3145 3150
 Glu Val Gln Ser Leu Gly Gln Ala Lys Val Tyr Ala Leu Arg Lys Leu
 3155 3160 3165

Ala Gly Thr Leu Glu Arg Gly Ala Pro Arg Arg Tyr Pro His Ile Gln
 3170 3175 3180
 Ala Gln Arg Ser Arg Ile Glu Ala Ala Trp Glu Arg Leu Asp Gln Ala
 3185 3190 3195 3200
 Ile Lys Ala Arg Thr Glu Asn Leu Ala Ala His Glu Val His Ser
 3205 3210 3215
 Phe Gln Gln Ala Ala Ala Glu Leu Gln Gly Arg Met Gln Glu Lys Thr
 3220 3225 3230
 Ala Leu Met Lys Gly Glu Asp Gly Gly His Ser Leu Ser Ser Val Arg
 3235 3240 3245
 Thr Leu Gln Gln Gln His Arg Arg Leu Glu Arg Glu Leu Glu Ala Met
 3250 3255 3260
 Glu Lys Glu Val Ala Arg Leu Gln Thr Glu Ala Cys Arg Leu Gly Gln
 3265 3270 3275 3280
 Leu His Pro Ala Ala Pro Gly Gly Leu Ala Lys Val Gln Glu Ala Trp
 3285 3290 3295
 Ala Thr Leu Gln Ala Lys Ala Gln Glu Arg Gly Gln Trp Leu Ala Gln
 3300 3305 3310
 Ala Ala Gln Gly His Ala Phe Leu Gly Arg Cys Gln Glu Leu Ala
 3315 3320 3325
 Trp Ala Gln Glu Arg Gln Glu Leu Ala Ser Ser Glu Glu Leu Ala Glu
 3330 3335 3340
 Asp Val Ala Gly Ala Glu Gln Leu Leu Gly Gln His Glu Glu Leu Gly
 3345 3350 3355 3360
 Gln Glu Ile Arg Glu Cys Arg Leu Gln Ala Gln Asp Leu Arg Gln Glu
 3365 3370 3375
 Gly Gln Gln Leu Val Asp Asn Ser His Phe Met Ser Ala Glu Val Thr
 3380 3385 3390
 Glu Cys Leu Gln Glu Leu Glu Gly Arg Leu Gln Glu Leu Glu Ala
 3395 3400 3405
 Trp Ala Leu Arg Trp Gln Arg Cys Ala Glu Ser Trp Gly Leu Gln Lys
 3410 3415 3420
 Leu Arg Gln Arg Leu Glu Gln Ala Glu Ala Trp Leu Ala Cys Trp Glu
 3425 3430 3435 3440
 Gly Leu Leu Leu Lys Pro Asp Tyr Gly His Ser Val Ser Asp Val Glu
 3445 3450 3455
 Leu Leu Leu His Arg His Gln Asp Leu Glu Lys Leu Leu Ala Ala Gln
 3460 3465 3470
 Glu Glu Lys Phe Ala Gln Met Gln Lys Thr Glu Met Glu Gln Glu Leu
 3475 3480 3485
 Leu Leu Gln Pro Gln Glu Leu Lys Pro Gly Arg Ala Gly Ser Ser Leu
 3490 3495 3500
 Thr Ser Phe Gln Trp Arg Pro Ser Gly His Gln Gly Leu Gly Ala Gln
 3505 3510 3515 3520
 Leu Ala Glu Thr Arg Asp Pro Gln Asp Ala Lys Gly Thr Pro Thr Met
 3525 3530 3535
 Glu Gly Ser Leu Glu Phe Lys Gln His Leu Leu Pro Gly Gly Arg Gln
 3540 3545 3550
 Pro Ser Ser Ser Ser Trp Asp Ser Cys Arg Gly Thr Leu Gln Gly Ser
 3555 3560 3565
 Ser Leu Ser Leu Phe Leu Asp Glu Arg Met Ala Ala Glu Lys Val Ala
 3570 3575 3580
 Ser Ile Ala Leu Leu Asp Leu Thr Gly Ala Arg Cys Glu Arg Leu Arg
 3585 3590 3595 3600
 Gly Arg His Gly Arg Lys His Thr Phe Ser Leu Arg Leu Thr Ser Gly
 3605 3610 3615
 Ala Glu Ile Leu Phe Ala Ala Pro Ser Glu Glu Gln Ala Glu Ser Trp
 3620 3625 3630
 Trp Arg Ala Leu Gly Ser Thr Ala Ala Gln Ser Leu Ser Pro Lys Leu
 3635 3640 3645
 Lys Ala Lys Pro Val Ser Ser Leu Asn Glu Cys Thr Thr Lys Asp Ala
 3650 3655 3660
 Arg Pro Gly Cys Leu Leu Arg Ser Asp Pro *
 3665 3670 3674

<210> 455
 <211> 673
 <212> PRT
 <213> Homo sapiens

<400> 455
 Met Leu Cys Trp Lys Thr Thr Ser Gly Arg Leu Lys Asp Ile Leu Ala
 1 5 10 15
 Ile Leu Leu Thr Asp Val Leu Leu Leu Gln Glu Lys Asp Gln Lys
 20 25 30
 Tyr Val Phe Ala Ser Val Asp Ser Lys Pro Pro Val Ile Ser Leu Gln
 35 40 45
 Lys Leu Ile Val Arg Glu Val Ala Asn Glu Glu Lys Ala Met Phe Leu
 50 55 60
 Ile Ser Ala Ser Leu Gln Gly Pro Glu Met Tyr Glu Ile Tyr Thr Ser
 65 70 75 80
 Ser Lys Glu Asp Arg Asn Ala Trp Met Ala His Ile Gln Arg Ala Val
 85 90 95
 Glu Ser Cys Pro Asp Glu Glu Glu Gly Pro Phe Ser Leu Pro Glu Glu
 100 105 110
 Glu Arg Lys Val Val Glu Ala Arg Ala Thr Arg Leu Arg Asp Phe Gln
 115 120 125
 Glu Arg Leu Ser Met Lys Asp Gln Leu Ile Ala Gln Ser Leu Leu Glu
 130 135 140
 Lys Gln Gln Ile Tyr Leu Glu Met Ala Glu Met Gly Gly Leu Glu Asp
 145 150 155 160
 Leu Pro Gln Pro Arg Gly Leu Phe Arg Gly Gly Asp Pro Ser Glu Thr
 165 170 175
 Leu Gln Gly Glu Leu Ile Leu Lys Ser Ala Met Ser Glu Ile Glu Gly
 180 185 190
 Ile Gln Ser Leu Ile Cys Arg Gln Leu Gly Ser Ala Asn Gly Gln Ala
 195 200 205
 Glu Asp Gly Gly Ser Ser Thr Gly Pro Pro Arg Arg Ala Glu Thr Phe
 210 215 220
 Ala Gly Tyr Asp Cys Thr Asn Ser Pro Thr Lys Asn Gly Ser Phe Lys
 225 230 235 240
 Lys Lys Val Ser Ser Thr Asp Pro Arg Pro Arg Asp Trp Arg Gly Pro
 245 250 255
 Pro Asn Ser Pro Asp Leu Lys Leu Ser Asp Ser Asp Ile Pro Gly Ser
 260 265 270
 Ser Glu Glu Ser Pro Gln Val Val Glu Ala Pro Gly Thr Glu Ser Asp
 275 280 285
 Pro Arg Leu Pro Thr Val Leu Glu Ser Glu Leu Val Gln Arg Ile Gln
 290 295 300
 Thr Leu Ser Gln Leu Leu Leu Asn Leu Gln Ala Val Ile Ala His Gln
 305 310 315 320
 Asp Ser Tyr Val Glu Thr Gln Arg Ala Ala Ile Gln Glu Arg Glu Lys
 325 330 335
 Gln Phe Arg Leu Gln Ser Thr Arg Gly Asn Leu Leu Leu Glu Gln Glu
 340 345 350
 Arg Gln Arg Asn Phe Glu Lys Gln Arg Glu Glu Arg Ala Ala Leu Glu
 355 360 365
 Lys Leu Gln Ser Gln Leu Arg His Glu Gln Gln Arg Trp Glu Arg Glu
 370 375 380
 Arg Gln Trp Gln His Gln Glu Leu Glu Arg Ala Gly Ala Arg Leu Gln
 385 390 395 400
 Glu Arg Glu Gly Glu Ala Arg Gln Leu Arg Glu Arg Leu Glu Gln Glu
 405 410 415
 Arg Ala Glu Leu Glu Arg Gln Arg Gln Ala Tyr Gln His Asp Leu Glu
 420 425 430

Arg Leu Arg Glu Ala Gln Arg Ala Val Glu Arg Glu Arg Glu Arg Leu
 435 440 445
 Glu Leu Leu Arg Arg Leu Lys Lys Gln Asn Thr Ala Pro Gly Ala Leu
 450 455 460
 Pro Pro Asp Thr Leu Ala Glu Ala Gln Pro Pro Ser His Pro Pro Ser
 465 470 475 480
 Phe Asn Gly Glu Gly Leu Glu Gly Pro Arg Val Ser Met Leu Pro Ser
 485 490 495
 Gly Val Gly Pro Glu Tyr Ala Glu Arg Pro Glu Val Ala Arg Arg Asp
 500 505 510
 Ser Ala Pro Thr Glu Ser Arg Leu Ala Lys Ser Asp Val Pro Ile Gln
 515 520 525
 Leu Leu Ser Ala Thr Asn Gln Phe Gln Arg Gln Ala Ala Val Gln Gln
 530 535 540
 Gln Ile Pro Thr Lys Leu Ala Ala Ser Thr Lys Gly Gly Lys Asp Lys
 545 550 555 560
 Gly Gly Lys Ser Arg Gly Ser Gln Arg Trp Glu Ser Ser Ala Ser Phe
 565 570 575
 Asp Leu Lys Gln Gln Leu Leu Leu Asn Lys Leu Met Gly Lys Asp Glu
 580 585 590
 Ser Thr Ser Arg Asn Arg Arg Ser Leu Ser Pro Ile Leu Pro Gly Arg
 595 600 605
 His Ser Pro Ala Pro Pro Pro Asp Pro Gly Phe Pro Ala Pro Ser Pro
 610 615 620
 Pro Pro Ala Asp Ser Pro Ser Glu Gly Phe Ser Leu Lys Ala Gly Gly
 625 630 635 640
 Thr Ala Leu Leu Pro Gly Pro Pro Ala Pro Ser Pro Leu Pro Ala Thr
 645 650 655
 Pro Leu Ser Ala Lys Glu Asp Ala Ser Lys Glu Asp Val Ile Phe Phe
 660 665 670 672

*

<210> 456
 <211> 463
 <212> PRT
 <213> Homo sapiens

<400> 456
 Met Ala Gln Val Ser Ile Asn Asn Asp Tyr Ser Glu Trp Asp Leu Ser
 1 5 10 15
 Thr Asp Ala Gly Glu Arg Ala Arg Leu Leu Gln Ser Pro Cys Val Asp
 20 25 30
 Thr Ala Pro Lys Ser Glu Trp Glu Ala Ser Pro Gly Gly Leu Asp Arg
 35 40 45
 Gly Thr Thr Ser Thr Leu Gly Ala Ile Phe Ile Val Val Asn Ala Cys
 50 55 60
 Leu Gly Ala Gly Leu Leu Asn Phe Pro Ala Ala Phe Ser Ile Ala Gly
 65 70 75 80
 Gly Val Ala Ala Gly Ile Ala Leu Gln Met Gly Met Leu Val Phe Ile
 85 90 95
 Ile Ser Gly Leu Val Ile Leu Ala Tyr Cys Ser Gln Ala Ser Asn Glu
 100 105 110
 Arg Thr Tyr Gln Glu Val Val Trp Ala Val Cys Gly Lys Leu Thr Gly
 115 120 125
 Val Leu Cys Glu Val Ala Ile Ala Val Tyr Thr Phe Gly Thr Cys Ile
 130 135 140
 Ala Phe Leu Ile Ile Ile Gly Asp Gln Gln Asp Lys Ile Ile Ala Val
 145 150 155 160
 Met Ala Lys Glu Pro Glu Gly Ala Ser Gly Pro Trp Tyr Thr Asp Arg
 165 170 175

Lys Phe Thr Ile Ser Leu Thr Ala Phe Leu Phe Ile Leu Pro Leu Ser
 180 185 190
 Ile Pro Arg Glu Ile Gly Phe Gln Lys Tyr Ala Ser Phe Leu Ser Val
 195 200 205
 Val Gly Thr Trp Tyr Val Thr Ala Ile Val Ile Ile Lys Tyr Ile Trp
 210 215 220
 Pro Asp Lys Glu Met Thr Pro Gly Asn Ile Leu Thr Arg Pro Ala Ser
 225 230 235 240
 Trp Met Ala Val Phe Asn Ala Met Pro Thr Ile Cys Phe Gly Phe Gln
 245 250 255
 Cys His Val Ser Ser Val Pro Val Phe Asn Ser Met Gln Gln Pro Glu
 260 265 270
 Val Lys Thr Trp Gly Gly Val Val Thr Ala Ala Met Val Ile Ala Leu
 275 280 285
 Ala Val Tyr Met Gly Thr Gly Ile Cys Gly Phe Leu Thr Phe Gly Ala
 290 295 300
 Ala Val Asp Pro Asp Val Leu Leu Ser Tyr Pro Ser Glu Asp Met Ala
 305 310 315 320
 Val Ala Val Ala Arg Ala Phe Ile Ile Leu Ser Val Leu Thr Ser Tyr
 325 330 335
 Pro Ile Leu His Phe Cys Gly Arg Ala Val Val Glu Gly Leu Trp Leu
 340 345 350
 Arg Tyr Gln Gly Val Pro Val Glu Asp Val Gly Arg Glu Arg Arg
 355 360 365
 Arg Arg Val Leu Gln Thr Leu Val Trp Phe Leu Leu Thr Leu Leu Leu
 370 375 380
 Ala Leu Phe Ile Pro Asp Ile Gly Lys Val Ile Ser Val Ile Gly Gly
 385 390 395 400
 Leu Ala Ala Cys Phe Ile Phe Val Phe Pro Gly Leu Cys Leu Ile Gln
 405 410 415
 Ala Lys Leu Ser Glu Met Glu Glu Val Lys Pro Ala Ser Trp Trp Val
 420 425 430
 Leu Val Ser Tyr Gly Val Leu Leu Val Thr Leu Gly Ala Phe Ile Phe
 435 440 445
 Gly Gln Thr Thr Ala Asn Ala Ile Phe Val Asp Leu Leu Ala *
 450 455 460 462

<210> 457

<211> 367

<212> PRT

<213> Homo sapiens

<400> 457

Met Gln Leu His Met Ser Thr Leu Lys Glu Arg Asp Gln Phe Phe Ser
 1 5 10 15
 Glu Leu Gln Glu Ile Gln Arg Thr Ser Thr Pro Arg Pro Asp Trp Thr
 20 25 30
 Lys Cys Lys Asp Val Val Ala Gly Gly Pro Glu Arg Trp Gln Met Leu
 35 40 45
 Ala Glu Gly Lys Asn Ser Asp Gln Leu Val Asp Val Leu Leu Glu Glu
 50 55 60
 Ile Gly Ser Gly Leu Leu Arg Glu Lys Asp Phe Phe Pro Gly Leu Gly
 65 70 75 80
 Tyr Gly Glu Ala Ile Pro Ala Phe Leu Arg Phe Asp Gly Leu Val Glu
 85 90 95
 Asn Lys Lys Pro Ser Lys Lys Asp Val Val Asn Leu Leu Lys Asp Ala
 100 105 110
 Trp Lys Glu Arg Leu Ala Glu Glu Gln Lys Glu Thr Phe Pro Asp Phe
 115 120 125
 Phe Phe Asn Phe Leu Glu His Arg Phe Gly Pro Ser Asp Ala Met Ala
 130 135 140

Trp Ala Tyr Thr Ile Phe Glu Asn Ile Lys Ile Phe His Ser Asn Glu
 145 150 155 160
 Val Met Ser Gln Phe Tyr Ala Val Leu Met Gly Lys Arg Ser Glu Asn
 165 170 175
 Val Tyr Val Thr Gln Lys Glu Thr Val Ala Gln Leu Leu Lys Glu Met
 180 185 190
 Thr Asn Ala Asp Ser Gln Asn Glu Gly Leu Leu Thr Met Glu Gln Phe
 195 200 205
 Asn Thr Val Leu Lys Ser Thr Phe Pro Leu Lys Thr Glu Glu Gln Ile
 210 215 220
 Gln Glu Leu Met Glu Ala Gly Gly Trp His Pro Ser Ser Ser Asn Ala
 225 230 235 240
 Asp Leu Leu Asn Tyr Arg Ser Leu Phe Met Glu Asp Glu Glu Gly Gln
 245 250 255
 Ser Glu Pro Phe Val Gln Lys Leu Trp Glu Gln Tyr Met Asp Glu Lys
 260 265 270
 Asp Glu Tyr Leu Gln Gln Leu Lys Gln Glu Leu Gly Ile Glu Leu His
 275 280 285
 Glu Glu Val Thr Leu Pro Lys Leu Arg Gly Gly Leu Met Thr Ile Asp
 290 295 300
 Pro Ser Leu Asp Lys Gln Thr Val Asn Thr Tyr Met Ser Gln Ala Phe
 305 310 315 320
 Gln Leu Pro Glu Ser Glu Met Pro Glu Glu Gly Asp Glu Lys Glu Glu
 325 330 335
 Ala Val Val Glu Ile Leu Gln Thr Ala Leu Glu Arg Leu Gln Val Ile
 340 345 350
 Asp Ile Arg Arg Val Gly Pro Arg Glu Pro Glu Pro Ala Ser *
 355 360 365 366

<210> 458

<211> 514

<212> PRT

<213> Homo sapiens

<400> 458

Met Ala Ser Val Leu Ser Arg Arg Leu Gly Lys Arg Ser Leu Leu Gly
 1 5 10 15
 Ala Arg Val Leu Gly Pro Ser Ala Ser Glu Gly Pro Ser Ala Ala Pro
 20 25 30
 Pro Ser Glu Pro Leu Leu Glu Gly Ala Ala Pro Gln Pro Phe Thr Thr
 35 40 45
 Ser Asp Asp Thr Pro Cys Gln Glu Gln Pro Lys Glu Val Leu Lys Ala
 50 55 60
 Pro Ser Thr Ser Gly Leu Gln Gln Val Ala Phe Gln Pro Gly Gln Lys
 65 70 75 80
 Val Tyr Val Trp Tyr Gly Gly Gln Glu Cys Thr Gly Leu Val Glu Gln
 85 90 95
 His Ser Trp Met Glu Gly Gln Val Thr Val Trp Leu Leu Glu Gln Lys
 100 105 110
 Leu Gln Val Cys Cys Arg Val Glu Glu Val Trp Leu Ala Glu Leu Gln
 115 120 125
 Gly Pro Cys Pro Gln Ala Pro Pro Leu Glu Pro Gly Ala Gln Ala Leu
 130 135 140
 Ala Tyr Arg Pro Val Ser Arg Asn Ile Asp Val Pro Lys Arg Lys Ser
 145 150 155 160
 Asp Ala Val Glu Met Asp Glu Met Met Ala Ala Met Val Leu Thr Ser
 165 170 175
 Leu Ser Cys Ser Pro Val Val Gln Ser Pro Pro Gly Thr Glu Ala Asn
 180 185 190
 Phe Ser Ala Ser Arg Ala Ala Cys Asp Pro Trp Lys Glu Ser Gly Asp
 195 200 205

```

Ile Ser Asp Ser Gly Ser Ser Thr Thr Ser Gly His Trp Ser Gly Ser
 210                215                220
Ser Gly Val Ser Thr Pro Ser Pro Pro His Pro Gln Ala Ser Pro Lys
225                230                235                240
Tyr Leu Gly Asp Ala Phe Gly Ser Pro Gln Thr Asp His Gly Phe Glu
                245                250                255
Thr Asp Pro Asp Pro Phe Leu Leu Asp Glu Pro Ala Pro Arg Lys Arg
                260                265                270
Lys Asn Ser Val Lys Val Met Tyr Lys Cys Leu Trp Pro Asn Cys Gly
                275                280                285
Lys Val Leu Arg Ser Ile Val Gly Ile Lys Arg His Val Lys Ala Leu
                290                295                300
His Leu Gly Asp Thr Val Asp Ser Asp Gln Phe Lys Arg Glu Glu Asp
305                310                315                320
Phe Tyr Tyr Thr Glu Val Gln Leu Lys Glu Glu Ser Ala Ala Ala Ala
                325                330                335
Ala Ala Ala Ala Ala Gly Thr Pro Val Pro Gly Thr Pro Thr Ser Glu
                340                345                350
Pro Ala Pro Thr Pro Ser Met Thr Gly Leu Pro Leu Ser Ala Leu Pro
                355                360                365
Pro Pro Leu His Lys Ala Gln Ser Ser Gly Pro Glu His Pro Gly Pro
                370                375                380
Glu Ser Ser Leu Pro Ser Gly Ala Leu Ser Lys Ser Ala Pro Gly Ser
385                390                395                400
Phe Trp His Ile Gln Ala Asp His Ala Tyr Gln Ala Leu Pro Ser Phe
                405                410                415
Gln Ile Pro Val Ser Pro His Ile Tyr Thr Ser Val Ser Trp Ala Ala
                420                425                430
Ala Pro Ser Ala Ala Cys Ser Leu Ser Pro Val Arg Ser Arg Ser Leu
                435                440                445
Ser Phe Ser Glu Pro Gln Gln Pro Ala Pro Ala Met Lys Ser His Leu
                450                455                460
Ile Val Thr Ser Pro Pro Arg Ala Gln Ser Gly Ala Arg Lys Ala Arg
465                470                475                480
Gly Glu Ala Lys Lys Cys Arg Lys Val Tyr Gly Ile Glu His Arg Asp
                485                490                495
Gln Trp Cys Thr Ala Cys Arg Trp Lys Lys Ala Cys Gln Arg Phe Leu
                500                505                510
Asp *
513

```

```

<210> 459
<211> 774
<212> PRT
<213> Homo sapiens

```

```

<400> 459
Met Ala His Glu Ala Met Glu Tyr Asp Val Gln Val Gln Leu Asn His
 1                5                10                15
Ala Glu Gln Gln Pro Ala Pro Ala Gly Met Ala Ser Ser Gln Gly Gly
                20                25                30
Pro Ala Leu Leu Gln Pro Val Pro Ala Asp Val Val Ser Ser Gln Gly
                35                40                45
Val Pro Ser Ile Leu Gln Pro Ala Pro Ala Glu Val Ile Ser Ser Gln
                50                55                60
Ala Thr Pro Pro Leu Leu Gln Pro Ala Pro Gln Leu Ser Val Asp Leu
65                70                75                80
Thr Glu Val Glu Val Leu Gly Glu Asp Asn Val Glu Asn Ile Asn Pro
                85                90                95
Arg Thr Ser Glu Gln His Arg Gln Gly Ser Asp Gly Asn His Thr Ile
                100                105                110

```

Pro Ala Ser Ser Leu His Ser Met Thr Asn Phe Ile Ser Gly Leu Gln
 115 120 125
 Arg Leu His Gly Met Leu Glu Phe Leu Arg Pro Ser Ser Asn His
 130 135 140
 Ser Val Gly Pro Met Arg Thr Arg Arg Arg Val Ser Ala Ser Arg Arg
 145 150 155 160
 Ala Arg Ala Gly Gly Ser Gln Arg Thr Asp Ser Ala Arg Leu Arg Ala
 165 170 175
 Pro Leu Asp Ala Tyr Phe Gln Val Ser Arg Thr Gln Pro Asp Leu Pro
 180 185 190
 Ala Thr Thr Tyr Asp Ser Glu Thr Arg Asn Pro Val Ser Glu Glu Leu
 195 200 205
 Gln Val Ser Ser Ser Ser Asp Ser Asp Ser Asp Ser Ser Ala Glu Tyr
 210 215 220
 Gly Gly Val Val Asp Gln Ala Glu Glu Ser Gly Ala Val Ile Leu Glu
 225 230 235 240
 Glu Gln Leu Ala Gly Val Ser Ala Glu Gln Glu Val Thr Cys Ile Asp
 245 250 255
 Gly Gly Lys Thr Leu Pro Lys Gln Pro Ser Pro Gln Lys Ser Glu Pro
 260 265 270
 Leu Leu Pro Ser Ala Ser Met Asp Glu Glu Glu Gly Asp Thr Cys Thr
 275 280 285
 Ile Cys Leu Glu Gln Trp Thr Asn Ala Gly Asp His Arg Leu Ser Ala
 290 295 300
 Leu Arg Cys Gly His Leu Phe Gly Tyr Arg Cys Ile Ser Thr Trp Leu
 305 310 315 320
 Lys Gly Gln Val Arg Lys Cys Pro Gln Cys Asn Lys Lys Ala Arg His
 325 330 335
 Ser Asp Ile Val Val Leu Tyr Ala Arg Thr Leu Arg Ala Leu Asp Thr
 340 345 350
 Ser Glu Gln Glu Arg Met Lys Ser Ser Leu Leu Lys Glu Gln Met Leu
 355 360 365
 Arg Lys Gln Ala Glu Leu Glu Ser Ala Gln Cys Arg Leu Gln Leu Gln
 370 375 380
 Val Leu Thr Asp Lys Cys Thr Arg Leu Gln Arg Arg Val Gln Asp Leu
 385 390 395 400
 Gln Lys Leu Thr Ser His Gln Ser Gln Asn Leu Gln Gln Pro Arg Gly
 405 410 415
 Ser Gln Ala Trp Val Leu Ser Cys Ser Pro Ser Ser Gln Gly Gln His
 420 425 430
 Lys His Lys Tyr His Phe Gln Lys Thr Phe Thr Val Ser Gln Ala Gly
 435 440 445
 Asn Cys Arg Ile Met Ala Tyr Cys Asp Ala Leu Ser Cys Leu Val Ile
 450 455 460
 Ser Gln Pro Ser Pro Gln Ala Ser Phe Leu Pro Gly Phe Gly Val Lys
 465 470 475 480
 Met Leu Ser Thr Ala Asn Met Lys Ser Ser Gln Tyr Ile Pro Met His
 485 490 495
 Gly Lys Gln Ile Arg Gly Leu Ala Phe Ser Ser Tyr Leu Arg Gly Leu
 500 505 510
 Leu Leu Ser Ala Ser Leu Asp Asn Thr Ile Lys Leu Thr Ser Leu Glu
 515 520 525
 Thr Asn Thr Val Val Gln Thr Tyr Asn Ala Gly Arg Pro Val Trp Ser
 530 535 540
 Cys Cys Trp Cys Leu Asp Glu Thr Asn Tyr Ile Tyr Ala Gly Leu Ala
 545 550 555 560
 Asn Gly Ser Ile Leu Val Tyr Asp Val Arg Asn Thr Ser Ser His Val
 565 570 575
 Gln Glu Leu Val Ala Gln Lys Ala Arg Cys Pro Leu Val Ser Leu Ser
 580 585 590
 Tyr Met Pro Arg Ala Ala Ser Ala Ala Phe Pro Tyr Gly Gly Val Leu
 595 600 605
 Ala Gly Thr Leu Glu Asp Ala Ser Phe Trp Glu Gln Lys Met Asp Phe
 610 615 620

Ser His Trp Pro His Val Leu Pro Leu Glu Pro Gly Gly Cys Ile Asp
 625 630 635 640
 Phe Gln Thr Glu Asn Ser Ser Arg His Cys Leu Val Thr Tyr Arg Pro
 645 650 655
 Asp Lys Asn His Thr Thr Ile Arg Ser Val Leu Met Glu Met Ser Tyr
 660 665 670
 Arg Leu Asp Asp Thr Gly Asn Pro Ile Cys Ser Cys Gln Pro Val His
 675 680 685
 Thr Phe Phe Gly Gly Pro Thr Cys Lys Leu Leu Thr Lys Asn Ala Ile
 690 695 700
 Phe Gln Ser Pro Glu Asn Asp Gly Asn Ile Leu Val Cys Thr Gly Asp
 705 710 715 720
 Glu Ala Ala Asn Ser Ala Leu Leu Trp Asp Ala Ala Ser Gly Ser Leu
 725 730 735
 Leu Gln Asp Leu Gln Thr Asp Gln Pro Val Leu Asp Ile Cys Pro Phe
 740 745 750
 Glu Val Asn Arg Asn Ser Tyr Leu Ala Thr Leu Thr Glu Lys Met Val
 755 760 765
 His Ile Tyr Lys Trp Glu
 770 774

<210> 460
 <211> 189
 <212> PRT
 <213> Homo sapiens

<400> 460
 Met Val Pro Gly Ala Ala Gly Trp Cys Cys Leu Val Leu Trp Leu Pro
 1 5 10 15
 Ala Cys Val Ala Ala His Gly Phe Arg Ile His Asp Tyr Leu Tyr Phe
 20 25 30
 Gln Val Leu Ser Pro Gly Asp Ile Arg Tyr Ile Phe Thr Ala Thr Pro
 35 40 45
 Ala Lys Asp Phe Gly Gly Ile Phe His Thr Arg Tyr Glu Gln Ile His
 50 55 60
 Leu Val Pro Ala Glu Pro Pro Glu Ala Cys Gly Glu Leu Ser Asn Gly
 65 70 75 80
 Phe Phe Ile Gln Asp Gln Ile Ala Leu Val Glu Arg Gly Gly Cys Ser
 85 90 95
 Phe Leu Ser Lys Thr Arg Val Val Gln Glu His Gly Gly Arg Ala Val
 100 105 110
 Ile Ile Ser Asp Asn Ala Val Asp Asn Asp Ser Phe Tyr Val Glu Met
 115 120 125
 Ile Gln Asp Ser Thr Gln Arg Thr Ala Asp Ile Pro Ala Leu Phe Leu
 130 135 140
 Leu Gly Arg Asp Gly Tyr Met Ile Arg Arg Ser Leu Glu Gln His Gly
 145 150 155 160
 Leu Pro Trp Ala Ile Ile Ser Ile Pro Val Asn Val Thr Ser Ile Pro
 165 170 175
 Thr Phe Glu Leu Leu Gln Pro Pro Trp Thr Phe Trp *
 180 185 188

<210> 461
 <211> 446
 <212> PRT
 <213> Homo sapiens

<400> 461


```

Met Ala Ala Pro Thr Pro Ala Arg Pro Val Leu Thr His Leu Leu Val
1      5      10      15
Ala Leu Phe Gly Met Gly Ser Trp Ala Ala Val Asn Gly Ile Trp Val
20     25     30
Glu Leu Pro Val Val Val Lys Glu Leu Pro Glu Gly Trp Ser Leu Pro
35     40     45
Ser Tyr Val Ser Val Leu Val Ala Leu Gly Asn Leu Gly Leu Leu Val
50     55     60
Val Thr Leu Trp Arg Arg Leu Ala Pro Gly Lys Asp Glu Gln Val Pro
65     70     75     80
Ile Arg Val Val Gln Val Leu Gly Met Val Gly Thr Ala Leu Leu Ala
85     90     95
Ser Leu Trp His His Val Ala Pro Val Ala Gly Gln Leu His Ser Val
100    105    110
Ala Phe Leu Ala Leu Ala Phe Val Leu Ala Leu Ala Cys Cys Ala Ser
115    120    125
Asn Val Thr Phe Leu Pro Phe Leu Ser His Leu Pro Pro Arg Phe Leu
130    135    140
Arg Ser Phe Phe Leu Gly Gln Gly Leu Ser Ala Leu Leu Pro Cys Val
145    150    155    160
Leu Ala Leu Val Gln Gly Val Gly Arg Leu Glu Cys Pro Pro Ala Pro
165    170    175
Ile Asn Gly Thr Pro Gly Pro Pro Leu Asp Phe Leu Glu Arg Phe Pro
180    185    190
Ala Ser Thr Phe Phe Trp Ala Leu Thr Ala Leu Leu Val Ala Ser Ala
195    200    205
Ala Ala Phe Gln Gly Leu Leu Leu Leu Leu Pro Pro Pro Pro Ser Val
210    215    220
Pro Thr Gly Glu Leu Gly Ser Gly Leu Gln Val Gly Ala Pro Gly Ala
225    230    235    240
Glu Glu Glu Val Glu Glu Ser Ser Pro Leu Gln Glu Pro Pro Ser Gln
245    250    255
Ala Ala Gly Thr Thr Pro Gly Pro Asp Pro Lys Ala Tyr Gln Leu Leu
260    265    270
Ser Ala Arg Ser Ala Cys Leu Leu Gly Leu Leu Ala Ala Thr Asn Ala
275    280    285
Leu Thr Asn Gly Val Leu Pro Ala Val Gln Ser Phe Ser Cys Leu Pro
290    295    300
Tyr Gly Arg Leu Ala Tyr His Leu Ala Val Val Leu Gly Ser Ala Ala
305    310    315    320
Asn Pro Leu Ala Cys Phe Leu Ala Met Gly Val Leu Cys Arg Ser Leu
325    330    335
Ala Gly Leu Gly Gly Leu Ser Leu Leu Gly Val Phe Cys Gly Gly Tyr
340    345    350
Leu Met Ala Leu Ala Val Leu Ser Pro Cys Pro Pro Leu Val Gly Thr
355    360    365
Ser Ala Gly Val Val Leu Val Val Leu Ser Trp Val Leu Cys Leu Gly
370    375    380
Val Phe Ser Tyr Val Lys Val Ala Ala Ser Ser Leu Leu His Gly Gly
385    390    395    400
Gly Arg Pro Ala Leu Leu Ala Ala Gly Val Ala Ile Gln Val Gly Ser
405    410    415
Leu Leu Gly Ala Val Ala Met Phe Pro Pro Thr Ser Ile Tyr His Val
420    425    430
Phe His Ser Arg Lys Asp Cys Ala Asp Pro Cys Asp Ser *
435    440    445

```

<210> 462

<211> 119

<212> PRT

<213> Homo sapiens

<400> 462
 Met Ile Leu Met Val Phe Gln Trp Lys Tyr Thr Ser Leu Pro Arg Ser
 1 5 10 15
 Ser Thr Leu Met Asp Trp Asn Leu Gln Phe Ser Leu Leu Trp Ala
 20 25 30
 Thr Ala Asp Ile Ser Asp Gln Leu Phe Gln Pro Pro Gln Lys Phe Ser
 35 40 45
 Trp Asp Pro Leu Glu Ser Ala Leu Cys Leu Tyr Ser Ser Gly Ser Ala
 50 55 60
 Lys Asp Leu Lys Gly Glu Met Gln Ser Phe Trp Tyr Pro Ala Arg Lys
 65 70 75 80
 Ser Pro Pro Leu His Leu Pro Ala Leu Gln Leu Phe Tyr Phe Gly Glu
 85 90 95
 Leu Pro Cys Lys Phe Leu Pro Ala Leu Val Val Pro Gly Ser Thr Leu
 100 105 110
 Pro Pro Ser Arg Pro Leu *
 115 118

<210> 463
 <211> 86
 <212> PRT
 <213> Homo sapiens

<400> 463
 Met Lys Ile Thr Gly Gly Leu Leu Leu Leu Cys Thr Val Val Tyr Phe
 1 5 10 15
 Cys Ser Ser Ser Glu Ala Ala Ser Leu Ser Pro Lys Lys Val Asp Cys
 20 25 30
 Ser Ile Tyr Lys Lys Tyr Pro Val Val Ala Ile Pro Cys Pro Ile Thr
 35 40 45
 Tyr Leu Pro Val Cys Gly Ser Asp Tyr Ile Thr Tyr Gly Asn Glu Cys
 50 55 60
 His Leu Cys Thr Glu Ser Leu Lys Ser Asn Gly Arg Val Gln Phe Leu
 65 70 75 80
 His Asp Gly Ser Cys *
 85

<210> 464
 <211> 267
 <212> PRT
 <213> Homo sapiens

<400> 464
 Met Arg Ser Thr Ser Lys Lys Thr Arg Lys Glu Asp His Ala Arg Leu
 1 5 10 15
 Arg Ala Leu Asn Gly Leu Leu Tyr Lys Ala Leu Thr Asp Leu Leu Cys
 20 25 30
 Thr Pro Glu Val Ser Gln Glu Leu Tyr Asp Leu Asn Val Glu Leu Ser
 35 40 45
 Lys Val Ser Leu Thr Pro Asp Phe Ser Ala Cys Arg Ala Tyr Trp Lys
 50 55 60
 Thr Thr Leu Ser Ala Glu Gln Asn Ala His Met Glu Ala Val Leu Gln
 65 70 75 80
 Arg Ser Ala Ala His Met Arg His Leu Leu Met Ser Gln Gln Thr Leu
 85 90 95
 Arg Asn Val Pro Pro Ile Val Phe Val Gln Asp Lys Gly Asn Ala Ala
 100 105 110

```

Leu Ala Glu Leu Asp Gln Leu Leu Ala Val Ala Asp Phe Gly Pro Arg
    115          120          125
Asp Glu Arg Asp Asn Phe Val Gln Asn Asp Phe Arg Asp Pro Asp Ala
    130          135          140
Pro Gln Pro Cys Gly Thr Thr Glu Pro Thr Thr Ser Ser Ser Leu Cys
    145          150          155          160
Gly Ile Asp His Glu Ala Leu His Lys Gln Ile Met Glu Tyr Lys Arg
    165          170          175
Arg Lys Asp Lys Gly Leu Gly Gly Leu Val Trp Gln Gly Gln Val Ala
    180          185          190
Glu Leu Thr Thr Gln Met Lys Lys Gly Arg Lys Arg Ala Lys Pro Arg
    195          200          205
Leu Glu Gln Asp Ser Ser Leu Lys Ser Tyr Leu Ser Gly Glu Glu Val
    210          215          220
Glu Asp Asp Leu Asp Leu Val Gly Ala Pro Glu Tyr Glu Cys Tyr Ala
    225          230          235          240
Pro Asp Thr Glu Glu Leu Glu Ala Glu Arg Gly Gly Gly Arg Thr Glu
    245          250          255
Asp Gly His Ser Cys Gly Ala Ser Arg Glu *
    260          265 266

```

<210> 465

<211> 348

<212> PRT

<213> Homo sapiens

<400> 465

```

Met Gln Tyr Met Tyr Phe Lys Ala Glu Pro Tyr Ala Ala Asp Glu Gly
  1          5          10          15
Ser Gly Glu Gly His Lys Trp Leu Met Val His Val Asp Lys Arg Ile
    20          25          30
Thr Leu Ala Ala Phe Lys Gln His Leu Glu Pro Phe Val Gly Val Leu
    35          40          45
Ser Ser His Phe Lys Val Phe Arg Val Tyr Ala Ser Asn Gln Glu Phe
    50          55          60
Glu Ser Val Arg Leu Asn Glu Thr Leu Ser Ser Phe Ser Asp Asp Asn
    65          70          75          80
Lys Ile Thr Ile Arg Leu Gly Arg Ala Leu Lys Lys Gly Glu Tyr Arg
    85          90          95
Val Lys Val Tyr Gln Leu Leu Val Asn Glu Gln Glu Pro Cys Lys Phe
    100          105          110
Leu Leu Asp Ala Val Phe Ala Lys Gly Met Thr Val Arg Gln Ser Lys
    115          120          125
Glu Glu Leu Ile Pro Gln Leu Arg Glu Gln Cys Gly Leu Glu Leu Ser
    130          135          140
Ile Asp Arg Phe Arg Leu Arg Lys Lys Thr Trp Lys Asn Pro Gly Thr
    145          150          155          160
Val Phe Leu Asp Tyr His Ile Tyr Glu Glu Asp Ile Asn Ile Ser Ser
    165          170          175
Asn Trp Glu Val Phe Leu Glu Val Leu Asp Gly Val Glu Lys Met Lys
    180          185          190
Ser Met Ser Gln Leu Ala Val Leu Ser Arg Arg Trp Lys Pro Ser Glu
    195          200          205
Met Lys Leu Asp Pro Phe Gln Glu Val Val Leu Glu Ser Ser Ser Val
    210          215          220
Asp Glu Leu Arg Glu Lys Leu Ser Glu Ile Ser Gly Ile Pro Leu Asp
    225          230          235          240
Asp Ile Glu Phe Ala Lys Gly Arg Gly Thr Phe Pro Cys Asp Ile Ser
    245          250          255
Val Leu Asp Ile His Gln Asp Leu Asp Trp Asn Pro Lys Val Ser Thr
    260          265          270

```

Leu Asn Val Trp Pro Leu Tyr Ile Cys Asp Asp Gly Gly Val Ile Phe
 275 280 285
 Tyr Arg Asp Lys Thr Glu Glu Leu Met Glu Leu Thr Asp Glu Gln Arg
 290 295 300
 Asn Glu Leu Met Lys Lys Glu Ser Ser Arg Leu Gln Lys Thr Gly His
 305 310 315 320
 Arg Val Thr Tyr Ser Pro Arg Lys Glu Lys Ala Leu Lys Ile Tyr Leu
 325 330 335
 Asp Gly Ala Pro Asn Lys Asp Leu Thr Gln Asp *
 340 345 347

<210> 466
 <211> 105
 <212> PRT
 <213> Homo sapiens

<400> 466
 Met Leu Ala His Leu Ser Phe Glu Arg Ser Leu Ile Leu His Leu Ile
 1 5 10 15
 Phe Ser Gly Ile Ala Val Ser Ile Lys Ala Leu Thr Lys Thr Trp Met
 20 25 30
 Pro Pro Glu Met Gly Ser Ser Pro Val Tyr Lys Ala Phe Ser Leu Leu
 35 40 45
 Gln Cys Arg Leu Ser Ala Gln Lys Trp Gly Ser Cys His Ser Gln Asn
 50 55 60
 Thr Leu His Trp Pro Val Trp Gly Pro Gln Thr Thr Leu Pro Ser Ser
 65 70 75 80
 Gln Ala Ser Phe Val Gly Trp Ala His Ser His Ser Pro Leu Ala Val
 85 90 95
 Pro Ala Ser Ser Asp Cys Val Leu *
 100 104

<210> 467
 <211> 107
 <212> PRT
 <213> Homo sapiens

<400> 467
 Met Ala Leu Leu His Ile Cys Val Gly His Pro Leu Leu Ser Phe Pro
 1 5 10 15
 Lys Ala Gly Asp Phe Ser Phe Ser Ser Gln Asp Asp Pro Ser Glu Leu
 20 25 30
 Thr Ala Gly Ala Lys Asp Lys Glu Phe Ser Cys Leu Leu Val Ile Cys
 35 40 45
 Leu Gln Pro Ala Pro Ser Thr Arg Ser Leu Phe Ser Trp Gln Leu Phe
 50 55 60
 Leu Leu Ser Phe Ser Leu Val Ser Phe Thr Leu Ile Tyr Arg Gly Glu
 65 70 75 80
 Phe Lys Lys Ser Gly Glu Ala Lys Asp Tyr Leu Thr Gln Val Gln Gly
 85 90 95
 Pro Ile Asp Cys Gly Lys Leu Leu Ala Thr *
 100 105 106

<210> 468
 <211> 92
 <212> PRT

<213> Homo sapiens

<400> 468

```

Met Phe Arg Ser Asn Pro Gly Phe Phe Phe Phe Cys Cys Cys Lys Ser
 1           5           10           15
Cys Ile Leu Ala Ile Ser Leu Gly Glu Ile Pro Arg Asn Glu Phe Thr
          20           25           30
Glu Asn Met Ser Leu Arg Glu Ser Glu Asp Leu Lys Pro Asp Leu Ser
          35           40           45
Ala Phe Lys Ser Ser Ala Leu Tyr Thr Asp Val Ser Ser Pro Val Phe
          50           55           60
Phe Thr Tyr Gln Asn Ser Arg Thr Leu Pro Glu Lys Pro Gly Arg Tyr
          65           70           75           80
Cys Ser Thr Pro Val Ser Cys Phe Ser Pro Gly *
                  85           90 91

```

<210> 469

<211> 79

<212> PRT

<213> Homo sapiens

<400> 469

```

Met Cys Arg Leu Tyr Ser Cys Ala Arg Met Pro Leu Phe Ser Thr Val
 1           5           10           15
Leu Phe Ser Asn Val Tyr Ile Asn Asp Phe Leu Leu Gln Lys Pro Glu
          20           25           30
Asn Thr Thr Ser Gln Pro Leu Ser Asn Gln Arg Val Val Glu Val Ala
          35           40           45
Ile Pro His Val Gly Lys Phe Met Ile Glu Ser Lys Glu Gly Gly Tyr
          50           55           60
Asp Asp Glu Val Pro Phe Thr Ala Leu Cys Thr Ile Ala Thr *
          65           70           75           78

```

<210> 470

<211> 113

<212> PRT

<213> Homo sapiens

<400> 470

```

Met Gly Ile Gln Trp Thr Cys Glu Trp Pro Ser Ser Leu Ser Pro Gly
 1           5           10           15
Trp Lys Phe Ile Ala Cys Leu Trp Phe Ser Met Trp Gly Ser Arg Pro
          20           25           30
Pro Leu Ser Gln Ala Met Ser His Lys Gln Trp Pro Met Leu Cys Ser
          35           40           45
Ser Ile Ser Asn Pro Glu Ala Ser Gly Thr Glu Leu Phe Thr Tyr His
          50           55           60
Phe His Met Met Gly Tyr Ile Glu Arg Phe Trp Pro Thr Glu Glu Leu
          65           70           75           80
Ala Gln Arg Cys Ser Leu His Lys Glu Leu Pro Cys Thr Val Phe Thr
          85           90           95
Glu Lys His Cys Ser Cys Thr Phe Leu Met Val Phe Gly Val Cys Thr
          100           105           110 112
*
```

<210> 471
 <211> 675
 <212> PRT
 <213> Homo sapiens

<400> 471
 Met Ala Ser Ala Gly Val Val Ser Gly Lys Ile Ile Tyr Glu Gln Glu
 1 5 10 15
 Gly Val Tyr Ile His Ser Ser Cys Gly Lys Thr Asn Asp Gln Asp Gly
 20 25 30
 Leu Ile Ser Gly Ile Leu Arg Val Leu Glu Lys Asp Ala Glu Val Ile
 35 40 45
 Val Asp Trp Arg Pro Leu Asp Asp Ala Leu Asp Ser Ser Ser Ile Leu
 50 55 60
 Tyr Ala Arg Lys Asp Ser Ser Ser Val Val Glu Trp Thr Gln Ala Pro
 65 70 75 80
 Lys Glu Arg Gly His Arg Gly Ser Glu His Leu Asn Ser Tyr Glu Ala
 85 90 95
 Glu Trp Asp Met Val Asn Thr Val Ser Phe Lys Arg Lys Pro His Thr
 100 105 110
 Asn Gly Asp Ala Pro Ser His Arg Asn Gly Lys Ser Lys Trp Ser Phe
 115 120 125
 Leu Phe Ser Leu Thr Asp Leu Lys Ser Ile Lys Gln Asn Lys Glu Gly
 130 135 140
 Met Gly Trp Ser Tyr Leu Val Phe Cys Leu Lys Asp Asp Val Val Leu
 145 150 155 160
 Pro Ala Leu His Phe His Gln Gly Asp Ser Lys Leu Leu Ile Glu Ser
 165 170 175
 Leu Glu Lys Tyr Val Val Leu Cys Glu Ser Pro Gln Asp Lys Arg Thr
 180 185 190
 Leu Leu Val Asn Cys Gln Asn Lys Ser Leu Ser Gln Ser Phe Glu Asn
 195 200 205
 Leu Leu Asp Glu Pro Ala Tyr Gly Leu Ile Gln Lys Ile Lys Lys Asp
 210 215 220
 Pro Tyr Thr Ala Thr Met Ile Gly Phe Ser Lys Val Thr Asn Tyr Ile
 225 230 235 240
 Phe Asp Ser Leu Arg Gly Ser Asp Pro Ser Thr His Gln Arg Pro Pro
 245 250 255
 Ser Glu Met Ala Asp Phe Leu Ser Asp Ala Ile Pro Gly Leu Lys Ile
 260 265 270
 Asn Gln Gln Glu Glu Pro Gly Phe Glu Val Ile Thr Arg Ile Asp Leu
 275 280 285
 Gly Glu Arg Pro Val Val Gln Arg Arg Glu Pro Val Ser Leu Glu Glu
 290 295 300
 Trp Thr Lys Lys Ile Asp Ser Glu Gly Arg Ile Leu Asn Val Asp Asn
 305 310 315 320
 Met Lys Gln Met Ile Phe Arg Gly Gly Leu Ser His Ala Leu Arg Lys
 325 330 335
 Gln Ala Trp Lys Phe Leu Leu Gly Tyr Phe Pro Trp Asp Ser Thr Lys
 340 345 350
 Glu Glu Arg Thr Gln Leu Gln Lys Gln Lys Thr Asp Glu Tyr Phe Arg
 355 360 365
 Met Lys Leu Gln Trp Lys Ser Ile Ser Gln Glu Gln Glu Lys Arg Asn
 370 375 380
 Ser Arg Leu Arg Asp Tyr Arg Ser Leu Ile Glu Lys Asp Val Asn Arg
 385 390 395 400
 Thr Asp Arg Thr Asn Lys Phe Tyr Glu Gly Gln Asp Asn Pro Gly Leu
 405 410 415
 Ile Leu Leu His Asp Ile Leu Met Thr Tyr Cys Met Tyr Asp Phe Asp
 420 425 430
 Leu Gly Tyr Val Gln Gly Met Ser Asp Leu Leu Ser Pro Leu Leu Tyr
 435 440 445

```

Val Met Glu Asn Glu Val Asp Ala Phe Trp Cys Phe Ala Ser Tyr Met
450                               455                               460
Asp Gln Met His Gln Asn Phe Glu Glu Gln Met Gln Gly Met Lys Thr
465                               470                               475                               480
Gln Leu Ile Gln Leu Ser Thr Leu Leu Arg Leu Leu Asp Ser Gly Phe
                               485                               490                               495
Cys Ser Tyr Leu Glu Ser Gln Asp Ser Gly Tyr Leu Tyr Phe Cys Phe
                               500                               505                               510
Arg Trp Leu Leu Ile Arg Phe Lys Arg Glu Phe Ser Phe Leu Asp Ile
                               515                               520                               525
Leu Arg Leu Trp Glu Val Met Trp Thr Glu Leu Pro Cys Thr Asn Phe
                               530                               535                               540
His Leu Leu Leu Cys Cys Ala Ile Leu Glu Ser Glu Lys Gln Gln Ile
545                               550                               555                               560
Met Glu Lys His Tyr Gly Phe Asn Glu Ile Leu Lys His Ile Asn Glu
                               565                               570                               575
Leu Ser Met Lys Ile Asp Val Glu Asp Ile Leu Cys Lys Ala Glu Ala
                               580                               585                               590
Ile Ser Leu Gln Met Val Lys Cys Lys Glu Leu Pro Gln Ala Val Cys
                               595                               600                               605
Glu Ile Leu Gly Leu Gln Gly Ser Glu Val Thr Thr Pro Asp Ser Asp
610                               615                               620
Val Gly Glu Asp Glu Asn Val Val Met Thr Pro Cys Pro Thr Ser Ala
625                               630                               635                               640
Phe Gln Ser Asn Ala Leu Pro Thr Leu Ser Ala Ser Gly Ala Arg Asn
                               645                               650                               655
Asp Ser Pro Thr Gln Ile Pro Val Ser Ser Asp Val Cys Arg Leu Thr
660                               665                               670
Pro Ala *
674

```

```

<210> 472
<211> 115
<212> PRT
<213> Homo sapiens

```

```

<400> 472
Met Gly Leu Glu Thr Gly Ser Val Gly Ser Gly Leu Val Pro Gly Ser
1                               5                               10                               15
Met Gly Ala Ser Leu Ala Leu Gly Phe Thr Glu Val Val Leu Val Leu
20                               25                               30
Gly Phe Thr Val Lys Leu Gly Ala His Leu Thr Leu Leu Pro Pro Leu
35                               40                               45
Gly Gly His Leu Ser Pro Tyr Cys Ala Ala Gln Ala Trp Glu Gly Val
50                               55                               60
Lys Gln Leu Met Cys Asn Cys Ser Ser Tyr Pro Leu Gln Cys Ile Ile
65                               70                               75                               80
Cys Cys Ile Tyr Ala Thr Pro Gly Cys Tyr Asn Leu Ser Phe Gly Ile
85                               90                               95
Leu Ser Ser Cys Glu Gly Ile Phe Val Tyr Glu Trp Leu Phe Glu Met
100                               105                               110
Leu Leu *
114

```

```

<210> 473
<211> 1404
<212> DNA
<213> Homo sapiens

```

<400> 473

gctgagaaag	gagggccgct	gcaggcgggg	ttcgaaccgt	ggggtctggg	ctgctcccgc	60
ggagggcctg	ggcggaacgc	ggatgctggg	ggctccgctgc	ctgctgcggg	ccgtgcgctt	120
ctgttctctc	gcccccttcc	ccaagcaca	accttcagcc	aaactgagcg	tgcgggacgc	180
tctcggggct	cagaacgcga	gtggggagcg	cattaagatc	cagggatgga	ttcgttctgt	240
ccgatcccag	aaggaagtct	tgttccctgca	tgtaaatgat	gggtcatctt	tggaaagcct	300
tcaggttggt	gcagattcag	gccttgacag	tagagaatta	acttttgga	gttctgtgga	360
agtacaagg	cagctgataa	aaagtccatc	caaaaggcaa	aatgtggaac	tgaaggcaga	420
aaaaattaaa	gttattggaa	attgtgatgc	caaggatttc	cccatcaa	ataaagagag	480
gcacctctg	gagtacctgc	gacaatatcc	tcactttagg	tgtaggacta	acgttctggg	540
ttctatatgt	aggattcgca	gtgaagcgac	agctgctatt	cattctttct	ttaaggacag	600
tggctttgta	catattcata	ctccaataat	cacatccaat	gactctgagg	gagctggaga	660
actttttcaa	cttgaacctt	caggcaaaact	taagggtacct	gaggagaatt	tcttcaatgt	720
tctgtctttc	ttactgtct	caggacaact	tcacttagaa	gtgatgtcag	gagcttttac	780
tcaagtgttt	acctttggtc	cgaccttccg	agctgaaaat	tctcagagcc	ggaggcacct	840
ggcagagttt	tatatgatag	aagcagagat	ttcttttgtt	gacagccttc	aagatcttat	900
gcaggttata	gaggaaactgt	tcaaggctac	aacaatgatg	gttctctcaa	aatgtcctga	960
agatgttgaa	ctctgtcaca	aattcatagc	acctggccaa	aaggacagat	tataacatat	1020
gctaaaaaac	aacttttta	tcatttctta	tactgaagca	gtggagatct	taaagcaagc	1080
atcccagaac	ttcaccttta	ccccagagt	gggtgctgac	ctacggactg	aacatgaaaa	1140
gtacctggtg	aagcactgtg	gcaacatacc	tgtctctggt	attaattatc	cattaacact	1200
caagcctttc	tacatgaggg	ataatgaaga	tggccctcag	gaactagagg	gaagtgtagc	1260
ttaacacagc	ctggggttga	tgattctcct	tagtattgta	gtcattggtc	agccttaaat	1320
gttcatactt	gtgcaaatgc	attaatggat	aaatacagca	tggtggctag	tggcatagat	1380
ttagagtcag	agagacttga	gttc				1404

<210> 474

<211> 1345

<212> DNA

<213> Homo sapiens

<400> 474

gagtgggcgg	ggcatttgct	ggagactgag	cctggcgcg	aggctatggg	cagccaggag	60
gtgctggggc	acgcggcccg	gctggcctcc	tccggctctc	tccctgcagac	taacgctgct	120
ttactcaacc	acctctctcc	tggccagaga	ggccttccgc	agagcatgtc	tcagtggggg	180
caccacgcga	gactggagcc	agacctcaa	cctgctgtgg	ctaacagtcc	ccctgggtgt	240
gttttggtcc	ttattcctgg	gctggatctg	gttgcaagctg	cttgaagtgc	ctgatccata	300
tggtgtccct	cactatgcaa	ctggagtggg	gctgtttggg	ctctcgccag	tgggtggagct	360
tctaggagag	cccttttggg	tcttggcaca	agcacatatg	tttgtgaagc	tcaagggtgat	420
tgcaagagag	ctgtcggtaa	ttcttaagag	cggtctgaca	gcttttctcg	tgctgtgggt	480
gcctcactgg	ggattgtaca	tttctctctt	ggcccagctt	ttctatacca	cagttctggg	540
gctctgctat	gttattttatt	tcacaaagtt	actgggttcc	ccagaatcaa	ccaagcttca	600
aactcttcc	gtctccagaa	taacagatct	gttaccat	attacaagaa	atggagcggt	660
tataaactgg	aaagaggcta	aactgacttg	gagttttttc	aaacagtctt	tcttgaaaca	720
gatttttgaca	gaaggcgagc	gatattgtgat	gacatttttg	aatgtattga	actttggtga	780
tcagggtgtg	tatgatatag	tgaataatct	tggctccctt	gtggccagat	taattttcca	840
gccaatagag	gaaagtgttt	atatattttt	tgctaagggtg	ctggagaggg	gaaaggatgc	900
cacacttcag	aagcaggagg	acgttgctgt	ggctgctgca	gtcttgaggt	ccctgctcaa	960
gctggccctg	ctggccggcc	tgaccatcac	tggttttggc	tttgccattt	ctcagctggc	1020
tctggatata	tacggaggga	ccatgcttag	ctcaggatcc	ggtcctgttt	tgctgcgttc	1080
ctaactgtct	tatgttctcc	tgcttgccat	caatggagtg	acagagtgtt	tcacatttgc	1140
tgcatatgag	aaagaggagg	tcgacaggta	caattttgtg	atgctggccc	tgctctcttc	1200
attcctggtg	ttatcctatc	tcttgacctg	ttgggtgtgg	agcgtgggct	tcactctggc	1260
caactgcttt	aacatgggca	ttcgatcac	gcagagcctt	tgcttcatcc	accgctacta	1320
cgaaggagc	ccccacaggc	ccctg				1345

<210> 475

<211> 1381

<212> DNA

<213> Homo sapiens

<400> 475

```

gcaggggggag aacagcccac ctctgtactg ggggctggcc cagcccggcc tatccctggg 60
ggaggggggag ggacaggggg agccctataa ttggacaagt ctgggatcct tgagtcctac 120
tcagcccag cggaggtgaa ggacgtcctt cccaggagc cgactggcca atcacaggca 180
ggaagatgaa ggttctgtgg gctgcgttgc ttgtcacatt cctggcagga tgccaggcca 240
aggtggagca agcgttggag acagagccgg agcccagact gcgccagcag accgagtggc 300
agagcggcca gcgctgggaa ctggcactgg gtcgcttttg ggattacctg cgtgggtgc 360
agacactgtc aggcaggtg caggaggagc tgctcagctc ccaggtcacc cagggaactga 420
gggcgctgat ggacgagacc atgaaggagt tgaaggccta caaatcgga ctggaggaa 480
aactgacccc ggtggcgagg gagacgcggg cagggtgtgc caaggagctg caggcggcgc 540
aggcccggtc gggcgcgagc atggaggagc tgtggggcgc cctcggtgca gtgaccgagg 600
tgatggtgtc agcccatgct cggccagagc agccgaggag ctgagggtgg cgcgtgcgcc 660
ttccacctgc gcaagctggc gtaagcggct cgtccgctg atgcctatga cctgcagaag 720
cgcctggcga gtgtaccagg cccggggccc gcgagggcgc cgaggcggcg gccgtcagcg 780
cgcatccgcc agcagcctgg gggcccctgg gtggaacagg gcccgctgc gggccgccac 840
cttgtgggct cctgtgtcgc ggcaagccgc tacaggaaagc gggcccaagg ctggggcgca 900
gcaggctgcg cgcgcggcac tggatggaga ttgggcagcc cggaccgcgc gtcgcctag 960
gaccgagggg gataggagcc aggtggcggg gaggtggcg cccggggccc ggccccccc 1020
aaaaaaaggg ctggagagca gccagcaga tacgcctgtg aggccagagg cctttcaagg 1080
cccgccctca agaagctggt ttcgagcccc ctggtgggaa gacatgcagc ggccagtggg 1140
cccgggctgg gtggagaagg tgcaggcct gcctgtggg acccagcgc gccctgtgc 1200
ccagccgaca attacttgaa cgcccgaagc ctgcagtcac gcgagccac gccatctccg 1260
tgccttctg gctccgcgca gcctgcaagc gggagaccct tgtctccgc cccagtcgt 1320
actctgcgag ttggaccctc attttataaa agatcaccca agtttcacgc caaaaaaaaa 1380
a

```

<210> 476

<211> 4385

<212> DNA

<213> Homo sapiens

<400> 476

```

agaaagtaac agtgacttct agatttctgg gttgggtcat cttgttggat agtagtacca 60
ctgagatagg gaattcaagg ttggggcaa gggtaattgg agatgagaat tgtgtttgga 120
ggtaactact gacattcaag ttggagagggt tagttggcag ttagttctat ggtcatctct 180
tttgccgaga ctgtatattt atcagactcc tgggagaaca ccaacatcca tggggttgta 240
gggaaggcta aggacaggag tggggagtgg taccttgaaa atccaaaagc catctcaagt 300
aaaagggaata aatgtgtcat gctttttaa aagttgatgt gcggaatg ttttcttggc 360
ttggaacctg ggcggccag gggatgacag tatggacttc cagtgaagta gtgacggaag 420
cctgatcata gacattaagg aaagcgggtg aggtgttgg agcttttgc gtaagaaaa 480
gttgagactt ttgttttgc ttgttttga gagatgtgta tgtatttctg ctgagtgata 540
aagccagcgg ggagggactg atttttatag gaaaggagga aaaataatgg aaacacatct 600
cattatttta ttgtcacatt tcttttctt gttatcttt gagtgtttcc cttttttgcc 660
agtagagtta ttgtctattt tttctttcta taggacaaaa aaactaatac agactccttt 720
atttttatat ggatatacta ggattgtaat tcagatattt aatatcttt atcagtgttc 780
agaatcatag attaatggag aaaacattta aaattgtttt aaatttaaat acattgaact 840
ctaacataga tgaanaatgt gtttactgct ttttatcagg tcgactgaaa gcaacgtatg 900
gtaaatattg aaaactccag gcacgaaaa caagagcaga agcaccttca gccacagcct 960
tataaaaggg aaggtaaatg gcataaatat ggtcgacta atggaagaca aatggcaaat 1020
cttgaaatag aattggggca attaccttt gatcctcaat actgattcac aattgagtta 1080
aattagacaa ctgtaagaga aaaatttatg tttgtataa tgtttgggtat tgaaactaat 1140
gaaattacca agatgacaat gtcttttctt ttgtttctaa gtatcagttt gataacttta 1200
tattattcct cagaagcatt agttaaaagt ctactaacct gcattttcct gtagtttagc 1260
ttcgttgaat tttttttgac actggaaatg ttcaactgta gttttattaa ggaagccagg 1320
catgcaacag atttttgcga tgaatgaga cttcctttca gtgtaagagc ttaaagcaag 1380
ctcagtcata catgacaaag tgaattaac actgatgttt gtgttaaat tgagcagag 1440
cttgagaaaa gtacattgtt ctggaatttc atcattaaca ttttataatc ttacactcac 1500

```

ttcttgtctt	tttgtgggtt	caagagccct	ctgacttgtg	aagaatttgc	tgccctctta	1560
agagcttgct	gacttgtttt	cttgtgaaat	tttttgcaca	tctgaataatc	gtggaagaaa	1620
caataaaact	acaccatgag	gaaaactaaa	gggtctttatt	taaaatctgg	cattgtatta	1680
acatgtaatt	ttatactatg	tggatatttt	tacatttcct	cagtagtgat	atttggtaaa	1740
gcagttcata	cagctttttt	ctaagttcca	tgaatcttac	ccagtgttta	ccgaagtatt	1800
taagcagcat	ctgaatat	ccaccagca	atgttaattt	atctaggaaa	gttcagaatt	1860
tcatcttcat	gttgaatttc	ccttttaact	tccgttcata	gacatatatg	tgacttccaa	1920
ttcgaccctc	tggcaagtga	gtgtggaaga	aaacagcagt	tcttttataa	ttgcttgaaa	1980
ttaggaaagc	gcttatttcc	tcttccaaaa	tgctcgaaag	tgatcaagtg	aagtagggca	2040
atgatgcac	atcatgaaac	tctctatgta	accagtttaa	gggatttagg	taaaatacat	2100
ctgcttcatc	aagataatga	ctttttccag	tcaggctctg	cgggcactgg	agaaatctca	2160
tgggaagtgg	gcagtgaaca	tcgctgtaat	aatgagtaga	gtggcaacgc	atcattataa	2220
atattgaagc	tgaagattaa	tcggggatgg	gtgaacaaac	tttttgaata	tgactcatga	2280
catcaagagt	acctcgttga	tgaactaaac	cagtataaag	ggcgaggaaac	aaatttgata	2340
aaaacaggaa	acttagagct	ggtttcttcc	atgttttcag	gtgggttaat	gagtatccac	2400
agaacaccat	acagaatggt	aaaactggat	aaataaacct	gaattctttg	tggtccaaca	2460
tgctataaac	aagcagtgtc	cacagcacag	tcaccaaag	tatccggtat	ctctttgggtg	2520
ctagatagca	gccatgaata	aagaagggtg	agtgaatacc	caagataact	ggaaatcctt	2580
gactgaagta	ccagtgccat	ggatgagaac	cataaaatgt	tcccagttc	tgacgacagt	2640
taaatttcaa	aaaattaaat	tgaaccagag	tccattggcc	aaaaaaaaat	acgatcaatc	2700
atcagagaca	aactcaaagt	aacaaagcct	acaggtaaaa	aatgatgtag	aataagatca	2760
agctttcttg	gttcttgaca	gaaatgtctg	aagagcaaa	gtgtccacag	aatgacagct	2820
gtgggacgaa	ttatgaaggc	aagtgccacc	agggatgagt	atttgacact	gttcatagac	2880
tttgaacctt	ccaaggata	gtagaaaaga	gcaattatag	tgagaacagt	ttccatgggtg	2940
tttgtaaagg	ttctgggtaca	gcaataccat	gtgaaccagg	agcacaaactg	gcaaaaaaac	3000
acccatcttg	ccacttcttg	atcttctagt	tgcttcatta	atgagtaaag	tctcacatct	3060
gctacagcag	acagaagtgc	ttgggcaagt	ctaggaatcc	aaatcagcaa	ctgaacacta	3120
tctttcccta	aaagatgaag	aatcttgtaa	atgcttgcaa	agattaaagg	ataagtgtaa	3180
ctctcagtc	tctctgtcca	ttccaagtc	aaataaccat	aattgaaaac	catgtgatgt	3240
gaaacttcaa	gagactgcca	gtattcatct	ggaacaaaac	ttgtctgcac	taaaaagcag	3300
tttaatatcc	gtaaagctat	ggtaaacaa	agcagataaa	tattttctcc	aagaagatcc	3360
ccgcggcgcc	tggcgctctt	ctcctgggtg	ttgaagtaca	aggtagactt	tctctttcgc	3420
agctttatct	tggcggtggg	gcggttcttg	agaccatgca	aagtgaaggct	ggcatctccg	3480
ccccccggct	ccattccgca	cttgcttagg	ggcctcctca	tcctggcgcg	ccaccttcc	3540
aaggcggaag	aaagctgcag	tagcgcgctg	ctcgtccatc	cattaagt	ggcctttgag	3600
agcagtcgtc	gctcgcaagc	ccggaagtga	ccgggaacgg	gcaacttcgt	agctcccacc	3660
cgacgtggtg	gctccttgc	ggtttccctt	cgccgtttcc	gaaccgaggg	attgctactc	3720
gcctttggct	tggcggtctc	tgtgctcggt	ggtcgaaaa	ctgctggaag	gcccccggtc	3780
tctggagggg	agcaggcggt	agcaggttta	gtgacgtgga	gcaggcgag	aacagtcgga	3840
gatttgaaga	gatttctctg	gtgtggagt	tgactttcca	aaaccagctt	ttccttgagc	3900
tgtatttgtt	gcagcaatgt	ttaggagatt	gacttttgca	caactgcttt	ttgccactgt	3960
ccttggaatt	gctggaggag	tatatatttt	tcaaccagta	tttgaacagt	atgccaaaaga	4020
tcagaaggaa	ttaaaagaaa	agatgcagtt	ggtacaagaa	tcagaagaga	agaaaagtta	4080
atactacatg	gagttaggcc	tggcacggtg	gctcacgcct	gtaatcccag	cactttggga	4140
ggccgagggc	ggtggatcac	gaggtcagga	gttcaacacc	agcctgacca	acatgggtgaa	4200
accctgtctg	tactaaaaat	gcaaaaatta	gccgggcatg	gtggcacatg	cttgtaatcc	4260
cagctactcg	ggaggctgag	gcaggagaat	cacttgaacc	cgggaggcgg	agggtgcagt	4320
gagccaagat	cgtgccactg	cactccagcc	tgggcgacag	agcaagactc	catctaaaaa	4380
aaaaa						4385

<210> 477

<211> 1223

<212> DNA

<213> Homo sapiens

<400> 477

tttcttccga	aagatctcca	tctgcatgtc	gctgctgggc	ttcctgctct	cccgctcgg	60
gctgctgctc	aagggtgctg	tggactggcc	agtggagggtg	ctgtacgggg	cggcgccgct	120
gaacgggcta	ttcgccggct	tctccgcctt	ctgggtccggg	gtcatggcgc	tgggatcgct	180
gggctcctcc	gagggccgcc	gctctgtgcg	cctcatcctc	attgacctga	tgctgggctt	240
ggcggggttc	tgcgggagca	tggcttcggg	gcatctcttc	aagcagatgg	ctgggcactc	300

tgggcagggc	ctgatactga	cggcctgcag	cgtgagctgt	gcctcgtttg	ccctgctcta	360
cagccttttg	gtgctaaagg	tccctgagtc	ggtagggcaaa	cccagccagg	agctccccgc	420
cgtggatacc	gtgtctggca	cgggttggcac	ataccgcact	ctggatcctg	atcagttgga	480
ccaacagtat	gcagtggggc	accctccatc	tcctggaaaa	gcaaaacccc	ataaaaccac	540
cattgccttg	ctctttgttg	gtgctatcat	atatgacctg	gcggtgggtg	gcacagtggg	600
cgtgatccct	ctttttgtgc	tgaggagacc	tctcgggttg	aaccaagtgc	aggtgggcta	660
tggtatggct	gcagggtaca	ccatcttcat	caccagcttc	ctgggtgtcc	tggtcttctc	720
ccgctgcttt	cgggacacca	ccatgatcat	gattgggatg	gtctcctttg	ggtcaggagc	780
cctcctcttg	gcttttgtga	aagagacata	catgttctat	attgctcgag	ccgtcatgct	840
gtttgctctc	atccccgtca	caaccatccg	atcagctatg	tccaaactca	taaagggctc	900
ctcttatgga	aaggtgttcg	tcatactgca	gctgtccttg	gctctgaccg	gcgtgggtgac	960
atccaccttg	tacaacaaga	tctaccagct	caccatggac	atgtttgggg	gctcctgctt	1020
tgtctctctc	tcctttctct	ccttctctggc	catcattcca	attagcatcg	tggcctataa	1080
acaagtccca	ttgtcaccat	atggagacat	catagagaaa	tgaagatgct	tacctgcagg	1140
aactgaaaac	atcagccatg	gccaggcccc	cagaagacaa	aagaaggggac	cagggaactg	1200
gtgacctaa	caaccactg	ctt				1223

<210> 478

<211> 884

<212> DNA

<213> Homo sapiens

<400> 478

catgctgctg	acgaattcgg	cacgagaccc	tgaagaggat	gttcctgttc	ctgtttcttc	60
tggtggccat	cctaccagtc	aacactgaag	gaggagagat	catatggggg	acagagtcca	120
aacccctc	cgggccttac	atggcattca	taaagtttta	tgatagtaat	tcagaacccc	180
atcactgtgg	cgggttctctg	gtggcaaaaag	acatcgtaat	gacagcagct	cactgtaatg	240
gaagaaatat	aaaagtaacc	ttaggtgttc	acaatatcaa	gaaacaagaa	aacacccagg	300
ttatctctgt	tgtaaaagcc	aaacctcacg	agaactatga	cagagattca	cattttaatg	360
acatcatgct	cctgaagttg	gaacgcaaa	ctcaactcaa	tgggtgttgt	gaagactatt	420
gcccttccta	ggagccaggga	ctgggtgaaa	cctgggcagg	tgtgcacagt	ggcaggttgg	480
ggacgcttgg	ccaattgtac	ttcgtctaac	acacttcaag	aagtgaatct	agaagtccag	540
aaaggccaga	agtgcacaaga	catgtccgaa	gactacaacg	actccatcca	gctttgtgtg	600
ggaaccccca	gccgagggga	aggctactgg	taaggagagac	ttcagggggg	ccctttgtgt	660
ggcgagggag	tggccccagg	gcattgtcag	ttatcggtt	gggtactggg	acactttctt	720
cgagtattca	cccagaatct	ccactttttt	accggggatt	tagaaaacca	atgaaaggcc	780
tttcaacaat	cctagaacca	caaacctgt	gtcttgcgcc	caagggtccac	caaccctggg	840
gattgggtat	tttagggcct	caaaaaaaaa	acccttgccc	cccg		884

<210> 479

<211> 4791

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(4791)

<223> n = a,t,c or g

<400> 479

ggggcagcag	acgggagttt	ctcctcgggg	tcggagcagg	aggcacgcgg	agtgtgaggc	60
cacgcagtag	cggacgctaa	ccccctcccc	agccacaaa	agtctacatg	tctagggtct	120
agacatgttc	agctttgttg	acctcgggt	cctgctctc	ttaagcggcc	accgccctcc	180
tgacgcacgg	ccaagaggaa	ggccaagtgc	agggccaaga	cgaagacatc	ccaccaatca	240
cctgctgaca	gaacggcctc	aggtagcatg	accgagacgt	gtggaaaccc	gagccctgcc	300
gtatctgcgt	ctgcgacaac	ggcaagggtg	tgtgcgatga	cgtgatctgt	gacgaagacc	360
aagaactgcc	ccggcgccga	agtccccgag	ggcgagtgtc	gtcccgctctg	ccccgacggc	420
tcaagagtca	cccaccgacc	aaagaaacca	cggggcgctc	agggacccaa	gggagacact	480

gggccccga	ggcccaaggg	ggacccgcag	gccccctgg	ccgagatggc	atccctggac	540
agcctggact	tcccggaacc	cccggacccc	ccggacctcc	cggaacccct	ggcctcgag	600
ggaaactttt	gctccccaag	ctgtcttatg	gctatgatga	gaaatcaacc	ggaggaattt	660
ccgtgcctgg	cccactgggt	ccctctgggt	ctcgtgggtc	ccctggcccc	cctgggtgcac	720
ctgggtccca	aggcttccaa	gggtccccct	gtgagcctgg	cgagcctgga	gcttcaggtc	780
ccatgggtcc	ccgaggtccc	ccaggtcccc	ctggaaagaa	tggagatgat	ggggaagctg	840
gaaaacctgg	tcgtcctgg	gagcgtgggc	ctcctgggcc	tcaggggtgct	cgaggattgc	900
ccggaacagc	tggcctccct	ggaatgaagg	gacacagagg	tttcagtggt	ttggatggtg	960
ccaagggaga	tgctggctct	gctggctcta	agggtgagcc	tggcagccct	ggtgaaaatg	1020
gagctcctgg	tcagatgggc	ccccgtggcc	tgctgggtga	gagaggtcgc	cctggagccc	1080
ctggccctgc	tggtgctcgt	ggaaatgatg	gtgctactgg	tgctgccggg	ccccctggtc	1140
ccaccggccc	cgttggtcct	cctggcttcc	ctggtgctgt	tggtgctaag	ggtgaagctg	1200
gtccccaagg	gccccgaggc	tctgaaggtc	cccaggggtg	gcgtgggtgag	cctggccccc	1260
ctggccctgc	tggtgctgct	ggccctgctg	gagacactgg	tgctaaggga	gagcctgggtg	1320
ctaaaggtgc	caatgggtgct	cctgggtattg	ctggtgctcc	tggtctccct	ggtgcccag	1380
gccccctctg	accccagggc	ccccggcgcc	ctcctgggtc	caagggtaac	agcgggtgaa	1440
ctggtgctcc	tggcagcaaa	ggagacactg	gtgctaaggg	agagcctggc	cctggttggtg	1500
ttcaaggagc	ccctggccct	gctggagagg	aaggaagcgc	aggagctcga	ggtgaacccc	1560
gacccactgg	cctggcccg	ccccctggcg	agcgtgggtg	acctggtagc	cgtggtttcc	1620
ctggcgagca	tggtgttgct	ggtcccaagg	gtcccgctgg	tgaacgtggt	tctcctggcc	1680
ctgctggccc	caaaggatct	cctgggtgaag	ctggtcgtcc	cggtgaagct	ggtctgcctg	1740
gtgccaaggg	tctgactgga	agccctggca	gcccctgggtc	ctgatggcaa	aactggcccc	1800
ccttggttcc	cgcccggtca	agatggctgc	ccccgacccc	caggccacc	tggtgccccg	1860
ggtcaggtgc	gtgtgatggg	attccctgga	cctaagggtg	ctgctnggaa	aagcccgcca	1920
aggctggaga	gcgaggttgt	tcccggaacc	cctgggcgct	gtcggctcctg	ctggcaagaa	1980
tggagaggct	ggagctcagg	gacccctcgt	ccctgctggt	cccgcctggc	agagaggtga	2040
acaaggccct	gctggctccc	ccggtattca	gggtctccct	ggtcctgctg	gtcctccagg	2100
tgaagcaggc	aaacctgggt	aacaggggtg	tccctggagac	ctttgcgccc	ctggccctc	2160
tggagcaaga	ggcggagaga	ggtttccctg	gcgagcgtgg	tggtgcaagg	ccccctggtc	2220
ctgctgggtc	ccgagggggc	aacgggtgct	ccggcaacga	tggtgctaag	ggtgatgctg	2280
gtgccccctg	agctcccggg	agccagggcg	ccccctggcct	tcagggaaatg	cctggtgaac	2340
gtggtgcagc	tggtcttcca	gggcctaagg	gtgacagagg	tgatgctggt	cccaaagggtg	2400
ctgatggctc	tccctggcaa	gatggcgctc	gtggtctgac	cgccccatt	ggtcctcctg	2460
gcccctgctg	tgcccctggt	gacaagggtg	aaagtgggtc	cagcggccct	gctggtccca	2520
ctggagctcg	tggtgcccc	ggagaccgtg	gtgagcctgg	tcccccgcc	cctgctgggt	2580
ttgctggccc	cctgggtgct	gacggccaac	ctggtgctaa	aggcgaaacct	ggtgatgctg	2640
gtgctaaagg	cgatgctgg	ccccctggcc	ctgcccggac	ccgctggacc	ccccggcccc	2700
attggtaatg	ttggtgctcc	tggagccaaa	agggtgctgc	cggcagcgct	tggtccccct	2760
tggtgcttac	ttggtttccc	ttggtgctgc	tggccgagtc	ggtcctcctt	ggccccctctg	2820
gaaatgctgg	acccccctgg	cctcctgggtc	ctgctggcaa	agaaggcggc	aaaggtcccc	2880
gtggtgaaac	tgcccctgct	ggacgtcctg	gtgaagttgg	tccccctggt	ccccctggcc	2940
ctgctggcga	gaaaggatcc	cctgggtgctg	atggccctgc	tggcgctcct	ggcactcccg	3000
ggccctcata	gtattggctg	gacagcgtgg	tggtgctggc	ctgctgggtc	agagaggaga	3060
gagaggcttc	cctggtcttc	ctggccctc	tggtgaacct	gggcaaacaa	ggtccctctg	3120
gagcaagtgg	tgaacgtgg	ccccctgggt	cccatggggc	ccccctggatt	ggctggaccc	3180
cctgggtgaa	tctggacgtg	aggggggtcc	tggtgcccga	ggttccccctg	gacgagacgg	3240
ttctcctggc	gccaagggtg	accgtggtga	gaccggcccc	gctggacccc	ctggtgctcc	3300
tggtgctcct	ggtgccccctg	gccccgttgg	ccctgctggc	aagagtgggtg	atcgtggtga	3360
gactggtcct	gctggtcccc	ccggtcctgt	cgccctggtt	ggcgcccggtg	gccccgcggg	3420
accccaaggc	ccccgtgggtg	acaagggtga	gacaggcgaa	cagggcgaca	gaggcataaa	3480
gggtcaccgt	ggcttctctg	gcctccagg	tccccctgcc	catcctggga	tctcctgggtg	3540
aacaagggtc	ctctggagcc	tctggtcctg	ctggtccccc	agggtccccct	ggcttctgct	3600
ggtgctcctg	gcaaagatgg	actcaacggt	ctccctggcc	ccattggggc	ccctggtcct	3660
cgcggtcgca	ctggtgatgc	tggtcctggt	gggtcccccg	gcccctcctg	acctcctggt	3720
ccccctggtc	ctcccagcgc	tggtttcgac	ttcagcttcc	tgccccagcc	acctcaagag	3780
aaggctcacg	atggtggccg	ctactaccgg	gctgatgatg	ccaatgtggt	tcgtgaccgt	3840
gacctcgagg	tggacaccac	cctcaagagc	ctgagccagc	agatcgagaa	catccggagc	3900
ccagagggca	gcccgaagaa	ccccgccccg	acctgccgtg	acctcaagat	gtgccactct	3960
gactgggaaga	gtggagagta	ctggattgac	cccaaccaag	gctgcaacct	ggatgccatc	4020
aaagtcttct	gcaacatgga	gactggtgag	acctgcgtgt	acccccactca	gcccagtggtg	4080
gcccagaaga	actggtacat	cagcaagaac	cccaaggaca	agaggcatgt	ctggttcggc	4140
gagagcatga	ccgatggatt	ccagtccag	tatggcgccc	agggtctccga	ccctgcccag	4200
gtggccatcc	agctgacctt	cctgcgcctg	atgtccaccg	aggcctccca	gaacatcacc	4260
taccactgca	agaacagcgt	ggcctacatg	gaccagcaga	ctggcaacct	caagaaggcc	4320

ctgctcctcc	agggtcccaa	cgagatcgag	atccgcgccc	agggaacag	ccgcttcacc	4380
tacagcgtca	ctgtcgatgg	ctgcacgagt	cacaccggag	cctggggcaa	gacagtgatt	4440
gaatacaaaa	ccaccaagac	ctcccgcttg	cccacatcag	atgtggcccc	cttggacgtt	4500
ggtgccccag	accaggaatt	cggtctcgac	gttggccctg	tctgcttcct	gtaaacctccc	4560
tccatcccaa	cctgggtccc	tcccaccaa	ccaactttcc	ccccaacccg	gaaacagaca	4620
agcaacccaa	actgaacccc	ctcaaaagcc	aaaaaatggg	agacaatttc	acatggactt	4680
tggaaaatat	tttttccctt	tgcatcctac	tctcaaacct	agtttttatc	tttgaccaac	4740
cgaacatgac	caaaaaccaa	aagtgcattc	aaccttacca	aaaaaaaaaa	a	4791

<210> 480

<211> 3690

<212> DNA

<213> Homo sapiens

<400> 480

gatataaacc	aggcattcga	gctggcaacg	gcaaccccat	ttgggttccc	tccctttgta	60
tgggagctct	gttttcactc	tattaaatct	tggaaactgca	ctcttctggt	ctgtgtttgt	120
tatgggtcga	gctgcagctt	cgctcacgtg	ccaccactgc	tggttgccac	cggtgcagac	180
ccatcgctga	cttccacccc	tccagatatg	gcagggtgtc	cgctgcgttt	ctgatatagc	240
aaggcgccca	ttgcgctccc	caatcggtct	aaaggctcgc	cattgttcct	gcatggctaa	300
gtgcccgggt	tgcctcta	ccagctgaac	actagtcagt	gggttccacg	gttctcttcc	360
atgaccacag	gcttctaata	gagctataac	actcaccatg	tggcccaagg	ttccattcct	420
tggaatgtgt	gaggccaaga	accccggtg	agagaacaaa	aggcttgcca	ccaccttggg	480
agcagcccg	caccatcttg	ggagctctaa	gaacaaagac	ccgcccggcc	ttagaactga	540
tgaccagta	ctttaacaac	tggaaactgg	tctacaacaa	cataacagat	caggatgaaa	600
gcgaattgac	tgggttggtt	ggaaatactc	aagaactcag	cccagctcta	gaactcacct	660
ctgagcatga	aggcaatggt	gggcacgctg	gtaaaggacc	actagaatcc	agcagctcgg	720
acccctttct	ttgtgctcgg	gaaaaggggt	gcaggactgc	tacatcgccc	atctcagtgg	780
tccggaagg	tgacgtggac	acggaagtgg	tctgctcgc	ggcaccggtg	ggagctaggc	840
gagaggtc	gagtgccggc	agcgggcgga	ggcggtctcg	catcgccggc	gacggagggc	900
tcaggcgctg	tccgttgggt	ggggggccgc	tgaactgaca	agcgacattt	cagctccttt	960
caccgcgccc	aaccccgagg	ccggggcccg	ctcagccggc	gttaccatga	ccaaggccgg	1020
tagcaagggc	gggaacctcc	gcgacaagct	ggacggcaac	gaactggacc	tgagcctcag	1080
cgacctgaat	gaggtcccgg	tgaaggagct	ggctgcccct	ccaaaggcca	ccatcctgga	1140
tctgtcttgt	aataaactga	ctactctacc	gtcggatttc	tggtggcctca	cacacctggg	1200
gaagctagac	ctgagtaaga	acaagctgca	gcagctgcca	gcagactttg	gcccgtcggg	1260
caacctccag	cacctggatc	tcctcaacaa	caagctggtc	accttgcttg	tcagctttgc	1320
tcagctcaag	aacctgaagt	ggttggacct	gaaggataac	ccccctggatc	ctgtcctggc	1380
caagggtggc	ggtgactgct	tggatgagaa	gcagtgtaag	cagtgtgcaa	acaagggtgt	1440
acagcacatg	aagccgtg	aggcagatca	ggagcgggag	aggcagcgcc	ggctggaagt	1500
agaacgtgag	gcagagaaga	agcgtgaggc	taagcagcga	gctaagggaag	ctcaggagcg	1560
ggaactgcg	aagcgggaga	aggcgggaaga	gaaggagcgc	cggagaaagg	agtatgatgc	1620
cctcaaagca	gccaaagcgg	agcaggagaa	gaaacctaa	aagggaagcaa	atcaggcccc	1680
gaaatctaag	tctggctccc	gtccccgcaa	gccaccaccc	cggaaagcaca	ctcgttctctg	1740
ggctgtgctg	aagctgctgc	tgctgtgctg	gctatttggg	gtggcgggag	gggctgggtg	1800
cttgtcgggt	gacagagctg	cagcagcagc	ccctctgcac	cagcgtgaac	accatctatg	1860
acaatgcggt	ccagggtcta	cgccgcctatg	agatcctcca	gtgggtcctc	cagaccgact	1920
ctcagcagtg	agcttgtccc	cagcacctgc	tgccctccag	ccttggagtt	tggattccta	1980
tggaaattgg	ttctgctgga	cacaacctct	ttttagcatc	agacctacct	gccatcatca	2040
aatggctgca	gattggtaca	tgagacctcc	tctttgtagg	acttcttcat	tccttagtca	2100
gggttccctg	aaggaaatgag	gagaaatggg	aggtggcggg	ggggcggtgg	gggcagttac	2160
ctgcatgcct	aaaggagtag	gcttgggggt	ggggagagag	aaaacatagc	cttttctagt	2220
tgttatataa	agctgtgtaa	aggcaaggct	cgtttctact	aaatgggtcag	ctgtcactac	2280
atttataact	ttgtatgcca	caaacccttt	cattcctccc	tgggaatcag	ggtagatcag	2340
gaggaaactg	gggggactag	aacaccacgc	tcagtaaatc	cagtctaaac	tgggaggtag	2400
gggtattcct	gttttcttta	ggacctcaga	gatgtaagca	ttttagcagc	cacacaaaat	2460
ctctggctat	gaaaaggact	tcatgacct	ccagtccaat	ataacacttg	cagacagaga	2520
aactgaggtc	ttccatgact	tgccatgtct	cccagctagt	ttgaggcaaa	actggattcc	2580
cactctggtt	ttctttcttc	cctttacatc	attttccctc	ctttataatg	tcctgagaga	2640
ccagaactca	caccagaatc	gattattcct	caggtgaagc	atagactctt	tcattggtaga	2700
cagatttcac	gactcagaga	tagaaatctc	ttgctatcat	caggtcacgc	gcagctcctg	2760

tggagtcctg	cccaacttat	gtggcttcca	taaaatggca	acagtccagg	ctccttgcc	2820
aattttagag	cattaactcc	ctaattgcca	gtaagcaagg	aggtggatct	ctgcaaacct	2880
acactgtcta	tgacagctct	agttgtactt	gggtgtgacta	aatacctcaa	aggcaacctg	2940
cttctgcagg	ttttgaagtg	tcagcttcat	aagacactga	ggtttagaat	tgtttgattc	3000
tagaccataa	ctgaaggcca	taaatggaaa	caggatatga	agggaacaa	gtagcatcat	3060
ggagctgaaa	agtgggtgcat	cacccaatgg	ctagcacaaa	caaggatcac	actgtccatt	3120
ctcttgtctg	ctaaattaag	cattttcttg	cctcctttgc	ttcatctttt	cacaacagct	3180
ggatagaggg	atcagaaaatg	actgtgtcat	gggtgtcatt	caactgcaaac	tcccagttgc	3240
aagctccttg	gtccccccgg	aggagagcaag	aatctcatag	ttcagagaca	cagagggcct	3300
tttagcccta	atgacctttt	ggatgggact	gcaactcatg	actatcctga	tattggaaga	3360
aaggactttg	ttaatcttct	cccccatagc	tctgtgctg	aggtctacat	cttactcaga	3420
atcactacac	attccttttag	tcttctctcca	agctccagag	ccattgggtac	aaatgcttta	3480
ttgaaactaa	atacataata	cacacaatga	gatgaagaca	atatagaagt	cgcacatagtc	3540
atcataatcc	cgttcccttg	cgggttgagg	cagctcagtg	gctgagccca	gtcaagccaa	3600
ccgcagctt	cactcacgac	ttcaagattt	gatgctaatt	cttttggtt	tctacagtta	3660
ttaaataagt	gtctgagtgg	aaaaaaaaa				3690

<210> 481

<211> 886

<212> DNA

<213> Homo sapiens

<400> 481

gtggactgga	ttagctgcgg	agccctggaa	gctgcctgtc	cttctccctg	tgcttaacca	60
gaggtgcccc	tgggttgac	aatgaggctg	gtcacagcag	caactgttact	gggtctcatg	120
atgggtgtca	ctggagacga	ggatgagaac	agcccggtgtg	cccatgaggc	cctcttggac	180
gaggacaccc	tcttttgcca	gggccttgaa	gttttctacc	cagagtggg	gaacattggc	240
tgcaaggttg	ttcctgattg	taacaactac	agacagaaga	tcacctcctg	gatggagccg	300
atagtcaagt	tcccgggggc	cgtggacggc	gcaacctata	tcctggtgat	ggtggatcca	360
gatgccccta	gcagagcaga	accagacag	agattctgga	gacattggct	ggtaacagat	420
atcaaggcgc	cgcacctgaa	ggaagggaag	attcagggcc	aggagtattc	agccctacca	480
ggctccctcc	cccaccggca	cacagtggcc	ttccatcgct	accaagttct	ttgtctatct	540
tcagggaagg	aaaagtcac	tctctccttc	ccaaggaaaa	caaaactcga	ggctcttga	600
aaatggacag	atttctgaac	cgtttccacc	tgggcgaacc	tgaagcaagc	accagttca	660
tgaccacaga	ctaccaggac	tcaccaaccc	tccaggctcc	cagagaaagg	gccagcgagc	720
ccaagcacia	aaaccaggcg	gagatagctg	cctgctagat	agccggcttt	gccatccggg	780
catgtggcca	cactgcccac	caccgacgat	gtgggtatgg	aacccctct	ggatacagaa	840
ccccttcttt	tccaaataaa	aaaaaaatca	tccaggaaaa	aaaaaa		886

<210> 482

<211> 853

<212> DNA

<213> Homo sapiens

<400> 482

ctcccttccc	gctgtgtggc	tccagcaagt	ttctctccac	ctcaggtttg	ggtttccagg	60
cattaagtga	caaagtggat	gcgacgctcc	ttctggactg	taatgcgcac	tgctgtggaga	120
tggtcgtgtt	ccagtgtaga	cagggcggtg	tcacatcagg	caggactaca	gggacaatgt	180
ttgtcagcct	gtcttctggg	caacttgggg	tatcctccct	ttatatcacc	tcctgcccag	240
gtgctctgcg	cgcagcagag	atcatgtcat	ttgggatccc	tgatggcaca	ttttgagact	300
ttggttcaca	gtaaagattg	gtcctgtgtg	atcttaaaat	aatgtggctt	aaaaacaaat	360
ggctgtcagg	gaattgtaaa	tcaaagcaaa	caccgatgag	aatggcccaa	atccaggaca	420
ctcagcacca	aatgcgaggg	aggatgtgaa	gccacaggaa	gcctcactca	ctgctggagg	480
gaacgcaaaa	caggacagcc	accttgggaag	acagtttgac	aaatccttag	aaagctaaac	540
acacttttac	cctgggatcc	aacaatcatg	ctccttgata	tttaccaga	ggagttaaaa	600
aaacttatgg	ccacactaaa	tacctgcaca	tgggggtaaa	taagagactt	tatttaggat	660
aattcataaa	cagctggatc	cttaaaggca	aacaaaagtt	ttactcttcg	caacacaaaa	720
ccaaaaactt	accgtggggg	gcccccacaa	cagttggaaa	atttttaccc	cgcccttaa	780

aaaaacagac gcccgcgatt gattcccaat gaaaatgtat cttcgcggaa actttttttc 840
acgactcggg agc 853

<210> 483
<211> 1756
<212> DNA
<213> Homo sapiens

<400> 483
caagagtgc actggatata ctccagaagt tggaccacc acagcctgca cactggactt 60
cttggtcttt atgagctatt caagagatat ttagtcatca cgttgtgtca caatgggagt 120
gactcacaga gcaaggagag aacctgagga ttccctcacac atgtagtact cagagctcta 180
cggaaaccca ggcacctcga cctcaagagg atcagcctgg ccagggtggc acaactcttc 240
cttccccgtg cacagcagga aagctgccat cagctgagca agtccacca cagtttctgt 300
gtcccacttc atctttaata aggacaccat ctctctgtat tatacaagaa aggagtgtac 360
ctatcacaca caggggggaaa aatgctcttt tgggtgctag gcctccta atctctgtggt 420
tttctgtgga ctcgtaaagg aaaactaaag attgaagaca tctactgataa gtacattttt 480
atcactggat gtgactcggg ctttggaaac ttggcagcca gaacttttga taaaaaggga 540
tttcatgtaa tgcgtgcctg tctgactgaa tcaggatcaa cagctttaa ggcagaaacc 600
tcagagagac ttctgtactgt gcttctggat gtgaccgacc cagagaatgt caagaggact 660
gccagtgagg tgaagaacca agttggggag aaagggtctct ggggtctgat caataatgct 720
ggtgttcccg gcgtgctggc tccactgac tggctgacac tagaggacta cagagaacct 780
attgaagtga acctgtttgg actcatcagt gtgacactaa atatgcttcc ttgtgtcaag 840
aaagctcaag ggagagttaa taatgtctcc agtgttggag gtcgccttgc aatcgttggg 900
gggggctata ctccatccaa atatgcagtg gaagggttca atgacagctt aagacgggac 960
atgaaagctt ttggtgtgca cgtctcatgc attgaaccag gattgttcaa acaaaacttg 1020
gcagatccag taaaggtaat tgaaaaaaa ctgccattt gggagcagct gtctccagac 1080
atcaaaacac aatatggaga aggttacatt gaaaaaagtc tagacaaact gaaaggcaat 1140
aaatcctatg tgaacatgga cctctctccg gtggttagagt gcatggacca cgctctaaca 1200
agtctcttcc ctaagactca ttatgccgt ggaaaagatg ccaaaatttt ctggatacct 1260
ctgtctcaca tggcagcagc ttgtcaagac tttttattgt tgaacagaa agcaagagct 1320
ggctaatecc aaggcagtg gactcagcta accacaaatg tctcctccag gctatgaaat 1380
tggccgattt caagaacaca tctccttttc aacccattc cttatctgct ccaacctcgg 1440
actccattta gatcgtgctt atttgattg caaaaggag tcccaccatc gctggtggta 1500
tcccagggtc cctgctcaag ttttctttga aaaggagggc tggaaatggta catccacata 1560
ggcaagtcct gccctgtatt taggctttgc ctgcttgggt tgatgtaagg gaaattgaaa 1620
gacttgccca ttcaaaatga tctttaccgt ggctgcccc atgcttatgg tccccagcat 1680
ttacagtaac ttgtgaatgt taagtatcat ctcttatcta aatattaaaa gataagtcaa 1740
acattaaaaa aaaaaa 1756

<210> 484
<211> 894
<212> DNA
<213> Homo sapiens

<400> 484
tttttttttt ttctgattga caatgagaat atttattgag ggtttattga gtgcaggag 60
aagggttga tgccttgggg tgggaggaga gaccctccc ctgggaccc gcagctctag 120
tctcccgtgg tgggggtgaa ggggtgagaa cctatgaaca ttctgtaggg gccactgtct 180
tctccacggt gctcccttca tgcgtgacct ggcagctgta gcttttgtgg gacttccact 240
gtcagggcgt caggctcagg tagctgctgg ccgctactt gttgttgct tgtttggagg 300
gtgtgggtgg ctccactccc gccttgacgg ggtgctatc tgccttccag gccactgtca 360
cggctcccgg gtagaagtca cttatgagac acaccagtgt ggcttgttg gcttgaagct 420
cctcagagga gggcggggaa agagtgacgg agggggcagc ctggggctga cttaggacgg 480
tcagcttggg ccctccgccg aacaccaag tgccactacc tgcatatgag cacacagtaa 540
taatcagatt catcatctgc ctgggcccc gtgatcgtga gggcagcttt gctcccaagg 600
atggatccag agaagcgacc agggacccca gaagagcgag tgtttgtgct gtagatgaga 660
gtacgtggag cctggcctgg ggtctgctgg taccagctgg ggtaaaaact agtggagact 720

gagccagatg	tcaagccaca	agtgagagtg	actgtccctc	caggggacac	tgagagcgat	780
ggctcttggt	tcaccacagt	ctgagattcc	actcctgac	cataagcaag	gagtcggagg	840
agaagcatca	tccaggccat	ggtggggaca	ctcatgaagg	cgaaggaatt	ccac	894

<210> 485
 <211> 6087
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)...(6087)
 <223> n = a,t,c or g

<400> 485

aaaaaaagca	taacatatcc	ccattgtaac	atttggaaac	taggaaaatg	gaaaggagca	60
aaagcaaaaa	ttctttgaat	agtacotcaa	cccaaagcct	tctttcttgg	cacggtagtg	120
tattttctttc	catttcgttc	tccacagtca	ttatatatgt	ataagattaa	tttcatttta	180
ttttatttat	tttcagacct	gttcaacagg	aagtaagatt	aattttaaac	cctgcttttt	240
tgaccaagct	tctcaacctaa	gcaccactga	atggcagcat	ggaattccct	ccacgccatc	300
catgcagctg	gtcccttagc	tccagtctct	gacttgccat	gtctctttgt	cctccccgac	360
aggacatgaa	accaaggctc	tgctgaacaa	cagtggggccc	cgctacaagc	gcagcaagct	420
ggagaggcag	atgaactcg	acgtgctctg	gtgtgtctctg	ctccttgttt	gcatgtctct	480
gtttttcagca	gtcggacatg	gactgtggat	atggcgggat	caagagaaga	agtcattatt	540
ttatgtcccc	aagtctgatg	gaagctcctt	atccccagtc	acagctgcag	tttactcatt	600
tttaacaatg	ataatagttc	tgagggtttt	gatcccaatt	tccttatacg	tttcattga	660
aattgttaaa	gcattgccaag	tgactttcat	taaccaggac	atgcagttgt	atgacgaaga	720
aacagactcg	cagctgcagt	gccgagctct	gaacatcacg	gaagacttag	gacagataca	780
gtacattttc	tcagataaaa	ctggcacttt	gacagagaat	aagatgggtt	tccgaagatg	840
cactgtgtct	ggtgtagaat	attctcatga	tgcaaatgcg	cagcgtcttg	ccagggtacca	900
agaggcagac	tccggaggag	aggaggtggt	gcccagaggg	ggctcgggtg	cccagcgcg	960
cagcatcggc	agccaccaga	gtgtccgggt	ggtgcacaga	accagagca	ccaagtccca	1020
ccggcgacg	ggcagccgg	ccgagggccaa	gagggccagc	atgctgtcca	agcacacggc	1080
cttcagcagc	cccatggaga	aggatatcac	gcccagacca	aagctgctgg	agaaggtag	1140
tgagtgtgac	aagagcctag	ccgtggcgag	gcattcaggag	cacctgctgg	cccacctctc	1200
gcccagctg	tctgacgtct	ttgatttctt	gactgcactc	accatctgca	acacagtcgt	1260
cgtcacgtcc	ccggtacagc	cacgaacaaa	ggtgaggggtg	aggtttgagc	tgaagtcccc	1320
ggtgaagacg	atagaagact	tctgcccggg	gttcacaccc	agctgcctga	cctcaggctg	1380
cagcagcatc	gggagcctgg	ccgccaacaa	gtccagccac	aagttgggct	ccagcttccc	1440
gtccaccccg	tccagcgacg	gcatgcttct	caggctggag	gagaggctgg	gccagcccac	1500
ctcggccatc	gccagcaacg	gctacagcag	ccaggcgagc	aactgggcct	cggagcttgc	1560
tcaggagcag	gagtcagagc	gcgagctgcg	gtacgagggc	gagagcccg	atgaggccgc	1620
actggtgtat	gcggccagag	cctacaactg	cgtgcttggt	gagcggtgc	acgaccaagt	1680
gtcagtgag	ctgccccacc	tgggcaggct	caccttcag	ctcctgcaca	cactgggttt	1740
cgattccgtc	cgcaagagga	tgtcagtggt	gatccggcac	ccgcttaccg	atgagatcaa	1800
cgtctacacc	aaggggggccg	actcagtggt	catggatctc	ctgcagccct	gctcttcagt	1860
tgacgccaga	gggaggcatc	aaaaaaagat	tccggagcaa	actcagaatt	acctcaacgt	1920
gtatgcggcg	gaaggcctgc	gcaccttggt	catcgccaag	agagttctga	gtaagaaga	1980
gtatgcctgc	tgggtgcaaa	gccacctaga	agccgaatcc	tccctggaaa	acagcgagga	2040
gctcctcttc	cagctctgcca	ttcgctgga	gaccaacctg	cacttggttag	gtgccactgg	2100
gattgaagac	gcctgcagg	acggagtcct	tgaaactatt	tctaaattgc	gtcaagcggg	2160
cctgcagatt	tgggttctca	ctggtgacaa	acaagaaaca	gctgtcaaca	ttgcatatgc	2220
ctgcaaaactg	ctggaccacg	acgaggaggt	catcaccctg	aatgccacct	cccaggaggc	2280
gtgtgcagcc	ctgctagacc	agtgcctatg	ctacgtgcag	tccagaggcc	cccagagagc	2340
ccctgagaag	accaaggcca	aagtgcagcat	gaggttctcc	tctctctgcc	cacctccac	2400
gtccactgcc	tctggccgca	gacccagcct	cgtgatcgat	gggagaagca	tggcctacgc	2460
tctcgagaaa	aacctggagg	acaaattcct	cttccttgcc	aagcagtgcc	gtcccgctct	2520
ctgctgtcgg	tgcagcctc	tgcagaagag	catggtgggt	aagctggtgc	ggagcaagct	2580
caaggccatg	acctggcca	tagtgatgg	agccaatgat	gtcagcatga	tccagggtggc	2640
agatgtgggt	gtgggaatct	ccggccagga	gggtatgcag	gcagtgatgg	ccagcgactt	2700
tgcagtgccg	aaattccgat	acctggagag	gctcttgatt	cttcacgggc	attgggtgcta	2760

ctcccgactt	gccaacatgg	tgctgtactt	cttctacaaa	aacacaaatgt	tcgtgggcct	2820
cctgttttgg	ttccagtttt	tctgtggctt	ctctgcatct	accatgattg	accagtggta	2880
tctaattctt	tttaattctgc	tcttctcgtc	acttcccccg	ctcgtgactg	gggtgctgga	2940
cagggatgtg	ccagccaatg	tgctgctgac	caaccccgag	ctctacaaga	gtggccagaa	3000
catggaggaa	taccggccac	gaacgttctg	gtttaacatg	gccgacgcgc	ccttccagag	3060
cctggtttgc	ttttccattc	cttacctggc	ctactatgac	tcgaacgtgg	acctgtttac	3120
ctggggggacc	cctattgtga	caatcgcgct	gctcactttc	ctgctccacc	tgggcattga	3180
aacccaaaacc	tggacctggc	tcaactggat	aacgtgtggc	ttcagtgtcc	ttttgttttt	3240
caccgtggct	ttgatttaca	atgcgtcttg	tgccacgtgc	tatcctccgt	ccaaccctta	3300
ctggactatg	caagccttac	tgggtgaccc	agtgttttac	ttgacttgcc	tgatgacgcc	3360
tgctcgctga	ctgctgcccc	gattgttttt	cagatccctc	caggggaggg	ttttccccac	3420
acaacttcag	ctggcagctc	agttgaccag	gaagtccccc	aggagatgca	gtgctcccaa	3480
agagaccttt	gctcagggac	gcccttncca	aggactcggg	aaccgaggca	ctcatcaggg	3540
aggacagtca	agacctctgt	gccccctgtc	cagccttctt	ggcacacaca	gcagccggtc	3600
tgctccctgg	aggccagcgg	ggagcccagc	acagtggaca	tgagcatgcc	agtgagggag	3660
cacacccccct	gctaaggggc	tgagcgcacc	gggccccaat	gtcctctgcg	ccaggggagg	3720
ctgtcctgag	gagtcacagga	gggtgtcctg	aggagtccaa	ggtgagagct	gccagcaccg	3780
gcaggggtgac	ccccctgtct	tccctcttca	gcctgcctac	cttcagctta	ctcaactgga	3840
tttctctctg	gtcgtctggc	agcaggctgg	ggagtgtctt	acagtctctc	cggacggagc	3900
agcttgacga	tggacaagcg	ggacgtggac	ttcctgtcca	gccccactca	ggccgatcag	3960
gacttcaagg	gccagaccac	agactactta	taggagcatc	ttcaaggcgg	tcacagtga	4020
aaccttgaaa	tggccttttt	taatatatat	aaataaatgt	taataattatt	tatgtttatt	4080
atttgcacag	aagagtctta	gggagatgta	tttctaaatg	tttcccaggc	taatacagga	4140
aacaagaggt	acccaaaaag	aaagtgttatt	ttttaaaatt	ctaagtagag	tatattgaaa	4200
agaaaaagaa	gagcctttaac	atatataaaa	gtttaaagaa	gagtaacact	tgaagagtgt	4260
gtttagattt	attttttcat	ctcattttta	agaacaagca	gtacgatttg	ttttcttcaa	4320
catgtgtgac	tgcgactga	gtacaaatgt	gtgactgtc	atggttaatg	caggcaggtg	4380
tgaacatggg	ggaacaatga	gcagagatgg	cagagggcag	agcacatggc	ccccagaggc	4440
ttccagtctc	actgacacag	gagggctggg	ctccacttca	tccagatgaa	ggaaggaag	4500
acctcaagaa	aaattcacag	ttgagtgcac	cccagcatte	tgttccgggc	aggcatctca	4560
ggaagaccgc	cttgtaggta	ttacatccct	ggtgtcgtat	ttgcctgtt	aaatcgtaac	4620
aagcaataaa	caactttcac	tttgcaaaga	cagtgtgtcc	agttaccact	ggtgtatgaa	4680
atgattaata	cctgacctca	cagagtatga	tctgagggca	cttccgtaag	gcaagtcctt	4740
ttagaggcta	tgaagaaaac	agctgcatgg	cacataccaa	agctgtgca	cagccggcca	4800
ccatggcacc	ctgcaccagg	ccatcagcac	cacgtgccaa	ggagctcagc	ggtcttcagg	4860
catttttgta	atgagccatt	agttctgtcc	ctctaaaact	agaaaaggaa	gggcaggaaa	4920
tgataacaac	ccaaggcaat	gatatggcat	gtcatcttct	gagcccttct	ttctactttg	4980
tcaaacagtt	cttagttgct	ggctctgctc	ggcaccgggg	ctgtgaaggg	tgtactccct	5040
gctgtgtggg	agggacctag	ggcctctttg	gatgctgtct	tcgaggacag	caatgcagag	5100
agggcatagg	atctgaggac	aaggaaattc	ctcagcatgg	cgtatcagga	aagcatggct	5160
cattctgcaa	tgagccatga	gtgtggggca	tcgcaagtca	cagaaattgc	acctcattcc	5220
agtcaagcag	aaaaacaggc	acaggctcag	tgtaggtccc	aagagagggg	gcctggactc	5280
agcaactcgg	acctgggctt	ttctcccagc	tttcaggagc	agctttgtcc	tgagtctgcc	5340
tctgttcacg	gggatgcttg	gctggagtca	cccccaggac	ttatccatgc	atcactattc	5400
agaagacaca	gagggcccct	ctctccacat	tccaaacaga	gtcctgggtt	cctcagcctc	5460
accctgcata	gcttgacaaa	catctcaga	accattcact	ggcaaatgga	ggggaacgtg	5520
ctgactggga	ctcccagctg	gagctgggag	gagaggcca	cttcccttag	aacacctgag	5580
ctgctgcatg	agtggacgtc	agaagaatct	ctatgccctg	ttaaatgggg	agacaaaggg	5640
gtgggtgggg	cttcagccag	tgattttcgga	ccgaagggtga	cagccgtccc	aaccctgccc	5700
agcctgatgc	cacctcctct	gttcttggaa	caacgcatag	gaaaagaatc	tcctttggaa	5760
ggtgacactg	ctccctgaat	taaggtaatg	gttgcgagca	ccaagtacaa	ggactagacg	5820
catattttacc	tgcgatatctg	agagtccag	attcccagct	tccagatgat	ccttgacacg	5880
acaacctacc	ttctttccag	aggatgtctt	tctcctctgg	agagttagatg	cttgctcttg	5940
ggaaacggaa	tgaccttggc	gctggcttca	ggaatatgca	tcccacagcc	agtttagaga	6000
aatacatgtt	gtaaatggca	ttgacagctg	ctcttttagga	tggggagtat	tatggaaatc	6060
cacaataaca	atctatggca	agcaact				6087

<210> 486

<211> 7705

<212> DNA

<213> Homo sapiens

<400> 486					
tttttttttt	tttgaagaaa	tctgattatt	caaatattatt	accatcaaga	attatgcaat 60
gatgtctgtag	tttttcttaa	caaatagaaa	acagactgtg	tacaacagtg	aactctacag 120
cactagcacc	cacaaggtaa	aaatgaatgt	ttcatcatcc	aacattacca	accctggaat 180
gttgatcttg	acttagccta	gctaggtttg	gggacgtcgg	caccacgtcc	ctcagctaaa 240
acagctatgc	acccttcccc	gccccactt	acctatctag	atagcgtcgc	ccagaggaaag 300
aggcgctctc	cctgccccct	agcaagctgg	gataataagg	actgattaga	gtaccattga 360
tagaagtcca	gtagtcttgc	cacattggtt	tatgagggca	tcttgagtg	gaaaagagcg 420
attatcgggg	gctttgaaaa	cagctgcaaa	ccagggagga	aaatcatctg	gccccgtctc 480
tgaggacaga	catgtgctac	caggccact	ggcctggacc	tgaaaggcca	gccacgcccc 540
cgcttgggccc	tgagggtgat	gggggtgtggc	acacacccta	acctgtgcta	ttcaccttgg 600
ccacacagcc	agaccccaca	gcctacaaac	accacaccat	actgcaatgc	tggggaccaa 660
agccaggctc	tgtgggcccc	ggtcagccag	cagctccctc	gggaaccccc	ggcacacgga 720
gttgcttccc	ctcttgaggg	tttgaagcag	aagccaaggg	ctgactcttt	ttttttttct 780
tgggtttttt	gttttttttg	ttttttattt	ttgtggtttt	ttgtttttgt	tttaaccttt 840
gcaaacacga	tggtgatgag	gaatgccttg	ccaggtctct	ccagacacat	ctgtggttct 900
gggctgtgaa	tggttaaacac	acactgggat	agacgaccag	ggatgagtgt	tccctatctt 960
ctccccgccc	accactgtca	atgtggccta	aaaaaaggct	ttaaagggaa	aacaaaactt 1020
aaaaaaacat	tgagtttccc	tgcatattagc	tgaaacagga	tctcgtctga	agggctggag 1080
gagcagccgg	atcagcactg	ctccccggcc	cacggccgag	cctccgctca	ggctggcagc 1140
cccagctttg	cacgaggaa	gcaatgttct	gtccttcagc	agaagtcata	caaaaataagg 1200
atccaaagtg	aactcaagaa	aaaaaaaaac	aaaaaaaat	aaaccccaac	ccctacagt 1260
gccccattctg	cagatacga	ttcgcgaaag	gaaaaatcag	agggagagg	ctaaaatccc 1320
tcagtctacc	ccacttaatg	tattaaaaag	gaggctttgc	cccaaccccc	ccccatgaga 1380
agaagcatga	gaaatgcggg	agcgcaacag	agagcttgaa	gcgggctcca	gggtgggtctg 1440
gtggacagaa	gggcccacag	gcctgcctgc	tgggccatcc	acttgccag	ggatgttcta 1500
ggctctctga	ttggtgtggc	aacgttctctg	aaacgctgtg	atccccgtgg	gctgtgctct 1560
gccagtgaac	gcatctcgct	aggaggggctg	gacgatggtc	ggatggctc	agaggagctg 1620
ggctccctcc	ggagccccac	ggcgggggtg	gcgaggagga	ggggagcgg	agttacgttg 1680
catagtggtc	aaagtgcgcg	aggtaactca	gggcccacg	gtagcacagc	tgatactggt 1740
cctctgtctg	caccatggca	ggacgtgtgt	tacgcagggt	cttcacggct	tgaaacatgt 1800
cgaccacgcc	ctcatagcgc	atgcgtctca	ggacgatgct	cagagtgatg	aacaccccg 1860
tgcgggccac	gccagcactg	cagtgcaccg	tgataggccc	atcctgtcca	aactgctcct 1920
tggtcttatg	cacctgccc	atgaagtcaa	tgaatccctc	gcctgtcttg	ggcacgccc 1980
gctctggcca	gtctgtgaac	tggaaactgc	ggattgtcct	tgactgccc	tcccgggcat 2040
ccgtgacctt	gaactcacgc	aggatatact	ggggcatggt	gtactcagcc	atcgggtcaa 2100
caacaaagta	ctggtagcga	gcagagcgt	ctgctggcca	gtactgggtg	catttctccc 2160
tgcccactct	ccgaagcttg	gtcagcatga	cgatgatggt	ggaattgtgc	tcccatagca 2220
tgcccagaaa	gtcctcggtg	ctctctgcca	gaggccccctg	tgtagctatg	taggccttct 2280
gctgtctata	accatccagg	aagctggcat	tgtatgagtc	agagccctcc	acaccacgga 2340
tgggctgcag	acacacacgg	gtcaattcgt	agggcatgat	gttcaccagc	cggttcttga 2400
acttgttgca	gggcaggttg	gcgtgatga	agcgggacgt	gtgggccttg	gagctggcca 2460
gcaacttgaa	ctcgagctcc	atggcggta	cactctcccc	tggaggcact	tggcccagct 2520
tctggatgtg	ggcatacagg	ttgcgggcag	gcacctctgt	gtggccgcac	gtggcagcct 2580
ccagcagcgc	ctcatggatg	aacacgtact	ggctcctcgt	ctgcaccatg	tagttcctct 2640
gtgatcgcat	gcaggctcag	tggccataga	tgtccaccgt	cttctcgtgc	ttcatccgct 2700
ccaacatggc	atcaatcacg	atgaagcagc	cgtgtcggcc	cacgcccgcg	ctgcagtga 2760
ccaccatggg	ccctgcgtct	aggggggttg	aggccttgac	ccgtcgtagg	aaggccagga 2820
tgggagttgg	gtactcagga	actccatggt	ctggccaggc	catgaactga	aactgacgca 2880
gctcacgctt	ctcactggag	ccactcttgt	ggagtgcgaa	ggtgcgcaca	gtgtatgtgg 2940
ccagctccac	tgtgtccaac	agggtcacct	gaataaggcc	acaggtctcg	gtgccacggg 3000
ctggccagta	ctgatacacat	tttaccggg	acttctctc	cagccgtgtc	atcatgacca 3060
cagtggccgt	gcgctgttcc	cacaccatcc	tccagaaatc	gccccatggtc	tccggcaggg 3120
ggccctgcgt	ggcgtatgtag	gcattctgct	tgcggtagcc	atcgatgtag	ttggcattga 3180
tgtagtcaact	cccggggacg	ccatcgatag	aggtaaggat	gactcgagag	tggtcgtagg 3240
cgatgacatt	cgcatagcgg	ttcttgggct	gtttccacctc	cagggttgaa	ttctcccacg 3300
tgaactgctg	tccagggtcg	atggactcat	actcctggga	gaacttgagg	ccatcggttg 3360
ctttgaggcg	ctcgatgttg	tccgccaggt	cgtgtatggg	gatgggtggg	tggtctcgca 3420
tacctggggg	ctggtagttg	agcctccgca	tctccacagg	gtcagaggag	tgggccagca 3480
aggagtcctt	cagtcggatc	gactgctcat	ccttagaggga	cggagagtgg	gtccttttcc 3540
ttttgaacaa	gaggatggcg	atgacaatga	ggatgatgag	gatgactgcc	agcacgggac 3600
ccgtcaccca	cagcatctcc	ggctcctcct	gctgtgggc	tggtgtcacc	tggaccacga 3660
tctcatccga	gtaggggctg	gaggcatagc	gcttctggtc	catgggttcc	ttcaaggagg 3720

caagcacaaa	gcaactggtag	ctcaagtccg	gagacagggg	ccggttgtag	aagccccggt	3780
agttcttctt	gtcccccaag	gtaaaggtct	ccgggagcac	atccagttga	gcagccacat	3840
atggcttcag	acgtttctgcc	tgccgcgcgc	gccgcgcgtg	ctcctctccg	ccttgctcga	3900
tggcttctag	aagctcgtcc	agctccagtt	cctcgggtgt	gtccacactt	ggcgtcagca	3960
tgctcccgcc	cacacggtca	atgggtacca	caacaatgta	gaaccacctg	acaagcgagg	4020
ggtcttgac	atggggcatg	gagagatcga	agcggccgtc	ctctatgtag	gcagaggcag	4080
gcagcggctt	gtgaggcagg	aggtcggggg	ctgtgcggat	ggacaccagg	tgctgcaggc	4140
cccctgcgct	gctgccacgg	ttcatcagca	caaacgagta	ctctgtgttg	ggctgcagggt	4200
ctgcgatcag	cttcgccatc	gagtgcccgt	ccacctccac	actctgccc	ttgtacagaa	4260
tcttaaaagg	cacagctgac	ttataggagt	cgggaacctc	ccagctgagc	agcacagacg	4320
tcttcattgc	agccgccacc	cggaaagttct	tggcaaacac	ttgctccacc	ggcatggtcc	4380
gggactggat	gctggggctg	agtggggccag	agcctttgct	ggcccatgct	cggaccttga	4440
tgctgtaagt	ggtgtctggc	ttgaggccag	taagggtaaa	gcgggtgtct	gtcgtgatgt	4500
tctgcagctc	ctgttggtcg	ttgatgtctc	ggaacaccac	ggtgtagctg	atgatgcgcc	4560
cgttctctc	cgccagcact	ggcgggtccc	aggccagtcc	tgtggtagac	gtggtcagtc	4620
ctgtcacatg	aggtttttgg	gggaagccgc	tgggcaggtc	ctcgggggtc	ctgatctcct	4680
tctcgaactc	ctcacccaag	ccagcccggg	tcttggcagc	aagccggaag	atgtaggtgg	4740
tcccccttgt	caggcccggtg	actgtgaagt	gctggtcacc	cttgccgaaa	tctatggtgt	4800
tgggcccgcg	ctcgtcggcc	cggcagtaact	gcagccggtg	gcccagcagc	tcgccaggca	4860
gttctcttgg	tgggttttcac	tggagcagcc	gcagtgttca	tggccgtggt	gctgatcacc	4920
atggtggggc	ggcctgggac	tgacactgtt	gtagtacaa	ttttgggctt	gctgcgggca	4980
ccatccccct	tgggtgtata	ggcagcaaca	gtaacggagt	aggtggtctc	cggggtcagg	5040
ccgctgatag	tgggttcata	gtcctcggac	tctctgggcc	gccactgggc	ctcggctagc	5100
atgacgtctt	ggatgatggg	gagtcacagg	ggctcgccat	tctccagccg	cacgtaggtg	5160
acctggtagc	cgcgatctg	gccaatgctg	ttgctgggga	caggcagctt	ccagttagaca	5220
tgcacagcag	tggagtccag	tggctccacc	tccaccttcc	gcggaggccc	gctgggcacg	5280
tcctcatcgg	tgcgcaccag	caccgggctg	ctctcggggc	cggggcccac	gtctgtgtgt	5340
gcccgacccc	acaccgggta	ctccgtccac	ttctccaggc	ccaccaggtc	ccagctggag	5400
tgctcacggc	tgatgccatc	caccacatgc	cgcccgcggg	cctcgccgtc	caccgcctcg	5460
tagggccagg	agtactgggt	gataacgccg	ttgcggctgt	cggcaggcgg	cgggacccaa	5520
cttaccggga	ccgtggtgga	gcccattgct	acacacatca	ccttctgggg	aggggcggag	5580
ggggtgggact	gggctgtgct	ggcctcaatg	gtgggggtga	agacgcccac	ccccatatcc	5640
gagcgtgcag	ccagctggaa	gcggtagagt	gtgtcaggct	tcaggctcctc	tagtgtgtag	5700
gaggagggtt	ggctgaaagg	gacctgtgct	tggtgtctct	cgctcctctg	cgccagttac	5760
accagttcat	acatgatgat	ccgctcctga	gggggcagca	gccacgagag	ctggatcctg	5820
gtgtccgact	ccacctcggc	ctggaagtcc	gcgggctggg	caggcactcc	ctgctgcgtc	5880
ttgacctgga	tgggtggggct	gggagggcca	tcgcccacgg	cgggtgaaggc	aagcacgcgc	5940
aggctgttag	tgtatgccag	cagcaggctg	cccacggtcg	tgaggagccc	cgcgtcgggt	6000
ttgtgcttgt	gccaggcgtt	cggggggcgg	cgggagtcgg	gagtatagta	gacgcgggtat	6060
ccccgcacca	ggcctgtggg	ctcctcggga	ggctccact	gcaccagcat	ggtgctggcg	6120
ctcagcatgc	gtgcttcgac	gcggcgcggt	gggctggagg	gcgcctgttc	tcccgtgcgt	6180
gcccgcactg	cctcgtcggg	cggccctcgc	ccgatgtgtg	tcaccgccag	cacgcggaag	6240
gcataattccg	agaaagggtc	gaggccgcca	atgctgtagc	gggtggtggc	caccccatcc	6300
acctcctgaa	aggggcccctc	cgtgcccgct	gcgcggtact	ggatgccata	gtaggttaca	6360
ggctccgagt	tcccagagtc	ccagggtgagg	gtgacactgg	tggcagttgt	ctctgtcacc	6420
acaagatcaa	tcggaggctt	tggaaagagt	ttcactgtga	cctgggctgt	ggcctcgatc	6480
atgcccagcg	aggagatggc	cacacagggt	tagttggcag	agcgtacgac	attgtgagc	6540
tccaggacgt	tgcggccaac	tggcatctca	tctccttgg	tgagctcctc	ggccccatc	6600
atccacttca	cgtagggcac	gggtgcaccc	actgccacgc	atgtcagggt	cacgctgccg	6660
cctggcatca	cctcctggct	gctgggaggg	atggagaaac	gaggagccac	gcggcgccact	6720
cgcacatata	ggttcgcagg	ggctgagtaa	cgtgtgcctg	ccgagttggt	cgccacacac	6780
tcgtacttgc	cttggtcgga	ttcctcactg	ctctctatct	gcaaggcacc	tgaacgcagc	6840
tgcttgatgc	ggccgttgct	cgtggcaggg	tctacaggaa	ggaagtcctt	gaaccaagaa	6900
atctcagggt	ctggatttcc	gcctgcggca	catagcatgg	tggctgtgct	tgcttctctc	6960
accaccttca	gctgaggccc	catgtcgatg	gaagggaacc	cagggggcag	ctgttctctc	7020
tcgagcactg	agagcttggc	actagtgttg	atctcaccga	ggctgttagt	agctgtacac	7080
tcatagatgg	cttcatctcg	ctgcacccgc	aatggctgga	tccgaagcac	tgacctgcc	7140
ccatcatcaa	actcaatgac	ctcgaagcgc	tgggagctga	ctttcttccc	cttcttcatc	7200
catgtgatgc	gcggttggg	ttctcctgta	gcttggcaca	cgaaggaggc	taccctcct	7260
gacagcccag	tctggctctc	agggacttta	atgaagacag	gtttgtctgc	accatggggc	7320
cctgccacca	aaccaagcat	caccagtga	ggcacaagg	gcaccatcgt	cctccctggg	7380
gctggctcag	gggcatcca	gggctctagc	tccacagcca	gccacagccc	aggacaatca	7440
accgagtcct	tgcttcttca	ccccggtcac	tcttgctgga	tactcagcac	caagggccgg	7500
gcaccagggc	ctccactcct	tccttcaata	ctgcccgctc	caggcagtg	catcttcagc	7560

aatttaatca	ctgacatgca	gagaccttcc	ctcctgcacc	actgtccaat	cagtcacaa	7620
tcctctctc	cttccgctct	gtctccctg	tgctcaggg	gctccggcg	ctccaggctt	7680
tgctctctat	tccccgtcca	cgaaa				7705

<210> 487
 <211> 1309
 <212> DNA
 <213> Homo sapiens

<400> 487						
cgacccacgc	gtccgatgtc	attactatat	ttcaatgcat	catgcttgta	actggcattt	60
catttataat	aagaatgagt	tattcatttg	taagccgttc	agtaatttat	ctactattcc	120
taaattggca	taatgttaga	taatctat	tgaatcacct	ttaattacat	gtcagaatgc	180
cttaactacc	ctaacttgac	aaaacagaat	tctttggtag	acgcggtggg	ggcgggggtg	240
gggggtctgga	cggagtctct	atttaaggag	aatcatcat	gctatgataa	aacacagaag	300
catgagtggc	aagtggcg	gtatttatt	tgacaaaact	atttgcagtc	tctgtgtatt	360
taaaaagtaa	agaaagtgc	atccagaagg	gttttgtag	aatgaataca	tttatattag	420
gactgacaac	ttcagctctt	ttgttttagt	tttcaattat	ttttggtaag	agtatgtagc	480
cttatgatct	ggatataatt	tgcatctatt	ttccaacgcc	tacatttaat	tcctggtaag	540
agcagtgtgc	gtcaagtttc	tggtttttct	ctgctctcat	ttaaccgcgc	aaacacaatc	600
tttgtaaagc	tagattgggt	gtgttttata	caacttattt	actcagctta	cctttttgag	660
aaacgattgt	tagaaattga	cgatgtgttt	gttccagtga	tactgaaagt	agtgggggca	720
agaattgagt	ttcacagtgg	aattggcttt	ggatctggcc	tatagattag	tgacataaaa	780
tattttctct	attttccct	gttctttttg	tgttatgcac	ttaattttat	gactgccggg	840
gggggtcagct	ggagtgtgc	ttacaagta	tctctctac	tctcagtggt	cagaggtgt	900
gttggaacca	tagtagaatt	ttccaggtca	cagacccaag	cttccatggg	ttgttactgt	960
gctgtaccac	ttgggtgggt	tgattctgaa	cctgatgtgt	gtgttaatta	tattttaagc	1020
aacacacaca	cacacacacg	cctcatgtaa	tggactttta	taacaaaaga	aaaaatttgg	1080
atttctaatt	tacaaatggc	aaattattta	tcctctctg	gatgcaccaa	agaccagtaa	1140
agtttatagc	ttttccatct	atatttataa	agcaatactg	tattataaaa	atcaatattt	1200
ttatcacatg	cttgaaattt	ttattttgtt	gttttaaaat	gtgcactcta	aacatatcag	1260
aaccttattt	cttcctatga	acttaagctg	cctgcgcaca	aaaaaaaa		1309

<210> 488
 <211> 1130
 <212> DNA
 <213> Homo sapiens

<400> 488						
ttctgtctgg	cggccgggta	agggctctgag	tggatctcct	gccaggccag	agcgccttcg	60
ggggccgcgg	cggaaggcca	ggagtgtgca	gccaggcgcg	cgggtttgtg	gtctgcagtg	120
tcgtgaggct	gaggtgcagc	atgtctagac	tgggagccct	gggtggtgcc	cgtgccgggc	180
tgggactgtt	gctgggtacc	gccgcgggcc	ttggattcct	gtgcctcctt	tacagccagc	240
gatggaaaacg	gacccagcgt	catggccgca	gccagagcct	gcccactcc	ctggactata	300
cgcagacttc	agatcccggga	cgccacgtga	tgctcctgcg	ggctgtccca	ggtggggctg	360
gagatgcctc	agtgtgtccc	agcctccac	gggaaggaca	ggagaagggtg	ctggaccgcc	420
tggactttgt	gctgaccagc	cttgtggcgc	tgccggcgga	ggtggaggag	ctgagaagca	480
gcctgcgagg	gcttgccggg	gagattgttg	gggaggtccg	atgccacatg	gaagagaacc	540
agagagtggc	tcggcggcga	aggtttccgt	ttgtccggga	gaggagtgc	tccactggct	600
ccagctctgt	ctacttcacg	gcctcctcgg	gagccacgtt	cacagatgct	gagagtgaag	660
gggggtgagt	tgctctctct	ggaggcagtt	atggctacag	ccaggttgtg	ttttgtaaaa	720
gtattatcaa	tgaaaaattc	aaaccaagct	gctgcaaatg	atttttggaa	caggtaagag	780
tataataaat	acagaagagt	tgaaaacaaa	aaccatcca	atttatgtca	ttcagacaaa	840
tgtagatgtt	aatagcagtt	attgcttgca	tctgttatct	tagtttatta	catagttatg	900
atatattatt	tgggcatttt	tctgtgttat	cacaaggact	tgataagcat	tgtttgactt	960
tgttcctttc	cttgggtggc	tgagctggta	tacggagatg	tctaagcacg	aagcatgctc	1020
ctccctggga	gtcaccctct	tcccacaggg	gagccttgcc	tgtgatcctt	tgcattttta	1080
cagggtgggag	gtggatgtcc	tgagttctca	gtggcccgag	agggctgacg		1130

<210> 489
 <211> 514
 <212> DNA
 <213> Homo sapiens

<400> 489
 ggcacgagaa ctggcttgta catagaagac gtcacacagt tttttcttcc ttgcattttc 60
 tctcttattt ctcaccctca cttcaaattg ttttaagtagt gaaattcttt tgcctatttc 120
 acctaaaact gagatgaaga ggaatgaggg agaattgtaa taattaactg ttctcctaga 180
 ttctggttcc ttttcccttt cactattcaa cacacatgta agtgccatt aggtgttagg 240
 taccacacta gacacttgga acagatagca gcaaataaga aacactgtcc ctatccatat 300
 gaagtacatt acaatagcag ctactggagg gcaggcatta tattacatac tttgcatgcg 360
 tatctcacat cataccacaca ttattattct tttttttttt ttttttttgg aaaaggggtc 420
 cccttttgcc cccagggggg gggggcgggg aaaggatctg ggtaaatggg ctcccaccgg 480
 gggacaaaac caaaatcctt tctgaaaaaa aaaa 514

<210> 490
 <211> 1052
 <212> DNA
 <213> Homo sapiens

<400> 490
 tttttttttt ttatttttaa ccatcattta ttttaactcg catgtttgaa ctgttaggtt 60
 gtatttatcg ttttctgtat tacagacgac ttgatgacaa atgaccaatc ctctaattgt 120
 caatataaaa atatcaattg cataaggaga taaggggcat ttggctaaaa taaaattcag 180
 tgtgccccac cctctccaca tgtaatttgc tctaaaaagg catgaatgac taaattagcc 240
 cttctattct ccagcgccag tectgagccc agcgggtggg gcagggtgctt agagcccggg 300
 ctttgctctt ctgccgccag aaaggcgaag gggcacccca accccgggat tctccctctc 360
 ccttttttat aaatagaaga gtgctcaggg tcagtgcacg agaccagcgc tttttgactt 420
 tgcacttatc agagtaactt agggggcctg tttaaaaata cacatttccc tggctgagct 480
 ccagaaaatt ggacttcagt ggttttagcg gagtgtgcat aggccagggtt attctgagga 540
 ccaacagggg tttaggaattg ccccgtaat tctggccaag ggagagatca gaccatccag 600
 cattgtccgc agcagagttt tccccctct tttgcaatga atatttgatg ctcagaggga 660
 tgagccccag gatgaggcac acatccaaga aaaatccatg cctctccatc ttttccccag 720
 gattgcccta agcgagccg ctctttgtga ttccttcaat tccccgggtt catagaacag 780
 gcctcttctt agtctgtttt gttgtctctt atctgttcaa caaacaccca ctgcgcagga 840
 ccctcctccg gtgagccgtc gagtggggcc gtttgggagc ccttcttcgt gggtagcac 900
 tgaaggaacc cgggtcccat aagcccggtc ttctatgggg gctgccccct ctcccatcgc 960
 agggtaaaag gcaccaggct gttaagcttt tcccaccacc tggaggatcc actctccgtc 1020
 cgtccttccc ggaattacac cacagtggta cg 1052

<210> 491
 <211> 692
 <212> DNA
 <213> Homo sapiens

<400> 491
 ctccaaacca cttttcactc tcagaaaatg agaccacaaa ggagtatgct ataaatcaaa 60
 ttgccaacc aattatgtag atattactca ttctaggact aatgatgatg gtaagaagt 120
 tgccagtgtt atggcaatga aaatttcaga aaggaggagt tgatgatctt ctatgatgat 180
 atgaacacct gtctatatct gcatgtatat gttttgacct gcagtgggtg caatgttgat 240
 atgtgttcaa gattattcct gtctacaaaa ctgaaggccc atgttcaaat tgttctttat 300
 tgggtgtttt tatggtcacg tggtaacaat tttcttacct aacctacaaa aggttctctt 360
 gatgaacatt tttatttata ttactaatc tttttaaaaa aaagctttca tagcattata 420

taatcagatg	aagaaagccc	agtagaataa	aaaaaaaaatt	cattagccta	gcctatatta	480
tgttttctgt	caaaggaaaa	caaattctca	aataggggaat	tctaaaaata	tttactaaag	540
taaaataact	acttaaaatg	ttttattcca	gttgggaagg	gaagggtaca	ggggaggaaa	600
ttggccaatt	atttagggga	gaagtatatt	tattataaga	tggtgtcctc	aaattagcct	660
accatggcac	gtaggggcag	cagctatatt	ag			692

<210> 492
 <211> 485
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)...(485)
 <223> n = a,t,c or g

<400> 492						
tgggcccgnn	naactgagga	actgantatc	taggaagagc	ggnggaattc	atattgcatg	60
tccatatttt	ccaaaaagag	taaagatagc	aagctactgt	ttaggattat	ggtaattctg	120
gatgtccttg	aactgtatca	catgtgggtt	cttggcatat	tatatgatgc	aattttttat	180
tgctttgtcc	atgcaataaa	cgctgataaa	tttttcgggt	taaaattaac	caagtctgct	240
actgtatccc	agaattctca	atgaaagaaa	atattttacag	tttttaacat	tacaggtaga	300
aaaaggatca	aagtgatttt	cttaaatctc	cttctaattc	atggaaaaga	gaacacagtc	360
agtgagggtc	tttgcctctg	ttccccaatt	ttctttgtcc	aaatggctca	tccttgaatt	420
caagaggagt	ggtgcaggat	ttaattgctc	ccacttgctc	tccttgtgca	aaactgcagc	480
tagaa						485

<210> 493
 <211> 741
 <212> DNA
 <213> Homo sapiens

<400> 493						
aaaatgttaa	agaactatct	ttccaaaacg	taaacactgc	cttcccttta	cttaaatgta	60
cgattttctt	ttgctcttga	gttttatctt	catagtggca	tcttactggg	ctttcctttc	120
caccatattt	ttggatgttg	tgtgttccat	tttacattgc	ccagttaaag	cacagacact	180
cctgaagtca	tggtttacatg	tggactgcaa	gtcaacctag	ttggcatggt	gatctaagct	240
acaaattgca	ctgctgtttt	gccgaaccca	acagtcgggt	tcttgccatt	atttgcggtg	300
ttttaactta	aaactcacgg	taatccttct	caccccatct	agtttggttt	aattgatcta	360
acaaacactg	cttgtttgaa	ttcaaatgga	ggatccatgg	aagctctccc	acccacacct	420
ttgatacttg	ataaggggtc	aaacagtact	tcttttaaat	tcagataatt	ctttgaatga	480
actatgaaat	acttcagagg	gaaaggaaat	atcgattctg	agatggagag	taaaagaaca	540
aggagatatt	cattactgtt	gcagataatt	tcttgcaatg	aaggaaaaaa	ttagacgggtg	600
gataattttt	gttgtgggtc	gtgcataggg	agataggtgg	accataaaac	actcttcctt	660
ggggaccgca	agtctcaacc	tagaactcat	ctttgaagct	gttactttac	ttgaacactc	720
cctttggaag	gggatctcaa	a				741

<210> 494
 <211> 1667
 <212> DNA
 <213> Homo sapiens

<400> 494						
gtcgaccac	gcgtccggca	gtgtaggggt	ggcgtgtcgg	agccccacac	tacaccacag	60
ggatgagcgt	gtatccccct	cagaggtgtg	cctggggact	ccgtgtgcgc	gactaggtgc	120

tctctggggg	ctggcagggg	catctgtccc	tttaccggag	caatggggag	ggtgcacacg	180
gttcaccagc	tttcgggcta	gctgggtagg	aggtgatgct	gccccgggtct	ggcaccact	240
tccccgggcc	tctcctaacc	cataggacag	tagtgctcct	ggcttgtgct	gcccagaggc	300
tacctggctt	tccctaattc	accgaccca	ggattaaccc	catggtggtt	ggtatcaggg	360
gatgaggcca	gagccctttg	agctgtgccc	ctcacagggg	tagggctcatg	gcctcagcca	420
tcccgggtacc	atctgtgccc	agccggggac	tgggaacctg	gtttctccat	gaggagccat	480
cccagggcct	gcaggaggga	ctagaagcca	gaggactctg	aggctccgct	tcctggggac	540
tgcaggggga	tcagaatgtc	ccaagcttgg	gacagtctgg	gaaggcagtg	gccatcccat	600
ccagatgagt	acatccctct	ctccttgcc	acttccctcc	taccagccgt	cgcgagggcc	660
actgatcctg	tgtgtgtgtc	accccaggac	gtgggaggct	gctctgtccc	tctggcctta	720
gtttccacat	ctgtatgggtg	gggttggggg	gcatgagtca	gcttctgttg	gccagcttac	780
tgccccctgt	gccccaaaggc	agccccaccc	ggaggaagct	ccctgcttcc	ctcctggtct	840
ccacagccct	catcagccct	gtttgtgtca	ggggctggat	gtggcaaaac	ttgcaaaacc	900
gcattcatgg	cagtcacaca	tctgcacgca	gggttccctc	cctgcctggg	gctgggcagg	960
taggtgtccg	gtgggaagcg	ggccctgcct	gcaggactca	gcccagccct	caaaacctgg	1020
caccaggcc	acatccctca	gcggcacagt	taattgaaaa	tcagccttg	aggagtgcga	1080
tgtctgggga	aagactgttc	ccagaggggc	aggagcatct	ggggcctctg	gtggctccca	1140
gggtccccat	gggaggagcc	ctgtgccctc	cactcccaag	tctcagttgt	gccatctgta	1200
aagtgggggc	cgccaggagg	gctggaggaa	ggtgacggga	cttcaggcct	tggaatgggg	1260
ctgagtggg	ggttcacatg	gccaccccat	ccctctccac	gctccaccgc	ctgggttgat	1320
accaccaggc	ggtggtttct	gggtcacatt	tgttgcaatt	caggtgctaa	tgggggcagg	1380
aggctgcagg	gggagggggc	ggtgtctagt	ggggcagatg	ttctcfaatg	gagaatgctc	1440
acagcggcct	gcagaggggg	tctggtgtgg	cctggggctc	atgggggttg	gatttacaca	1500
gtgagcctgg	gctttggggc	acagctgctg	ctgacagagg	gtcttggggg	ctgggaaggt	1560
gcttaaagcc	cggcccccat	gcctgagctc	ccacaccct	gtttaggggac	accagatag	1620
ggtgtctcct	gcaggaaatt	ccccacataa	ttcatttatt	taaaaaa		1667

<210> 495
 <211> 629
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)... (629)
 <223> n = a,t,c or g

<400> 495						
aacatttcca	gaaccagaca	gcacccctac	ttgtaccac	taaaggtaac	tactagtgtg	60
acttctatct	ttgttgggtg	gttgtatcca	ttcttgtaca	tcataaagat	gaaaccatat	120
tgtatgtatc	ctttctgtc	tggcctcctt	agctccttat	tattttgggt	tgagtcattg	180
atgttgttat	gtgtgcagat	gggtcttttt	ttaatgctat	gtgtattgga	ttacaggata	240
tattgcatca	aaatttatgt	atccattata	ttattaatga	gcatttggat	tatttcaatt	300
taagactatt	ttgaatacaa	ttactgtaat	tgtcttggtc	atatcatgtg	ttcaacatat	360
gcacttactc	ctaagagagg	aatttgtagg	tcataggata	tgtgtatgat	cagcttgggt	420
atacactacc	agttttctcc	tgtcaaccag	gcatgagaaa	tctaattgcc	ctatgtgctg	480
actaaaacat	gaaattggga	ggcctctaat	tctaaccctt	ctggagaggg	ccccccccc	540
cccttggggg	ggggggcctc	ccccccacc	ccgnnggggn	naatttttaa	ataaagtcgt	600
ggttaagtta	tagatttttt	taaaaaatt				629

<210> 496
 <211> 757
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)... (757)
 <223> n = a,t,c or g

<400> 496
 tatagagacc actagtccaa gtggaggaat tcctcccctc tagcccccctt ccttacctgg 60
 taagtcaaat gaaccaaag tcaaacagtt tggaaaggag agttgaagca gaaggaaact 120
 tccttctgcc cctttgaatt tgttactttt tcttccaatt aaaaatgtgt tattttttaca 180
 ataccattat attgacattg caagggtccc tgatgttttt attgttttct gttgtcactt 240
 tgtatctctt ctcccattcc catccactc ccattagcat cttctctgat gtgtttaata 300
 tgtatccttg gatataatg tattctttaca tgggtgtttc tgtaaattta tataaatagt 360
 attacatgat aattctcatt ctgacccctt cttcatttaa aactatgttt ttcagtctcg 420
 ttggtgttgt gtttataatg tgcttttagc cactgcattg tatttttatt gctctgtcta 480
 ctgcgtttta tttgcctgtt ccctaagtg acagacacct tatttgttct ccctgtacca 540
 caaacaatgc tctgtgggta tagtggtca cacttatagg ctcatgctt tggggaggat 600
 gacgcagaaa gatcgcttga gccaggagt ttcaaaccac accgggcaat gagaccctaa 660
 cctcatctct gccacaaatt aaaaacttaa ttgagcacat tggcattgtg ctcccccccc 720
 anctncttca cagactgggg aagaaaaacc attcacc 757

<210> 497
 <211> 429
 <212> DNA
 <213> Homo sapiens

<400> 497
 cacaacatgg ctgcggcgcc tgggctgctc gtctggctgc tegtgtccg gctgcctgg 60
 cgggtgcccgg gccagctgga cccagcact ggcggcggt tctcgagca caaactctgc 120
 gcggacgacg aatgcagcat gttaatgtac cgcggtgagg ctctgaaga ttccacaggc 180
 ccggtattgtc gttttgtgaa ttttaaaaaa ggtgatccctg tatatgttta ctataaactg 240
 gcaagaggat ggcctgaagt ttgggctgga agtaaatgag atgccacctg tgggtcccaac 300
 tgacaaagat taaggaaggt tggacgcact ttgggatatt ttccaaaaga tttaatccag 360
 gtagttcatg aatataccaa agaagagcta caagttccaa cagatgagac ggattttgtt 420
 tgtttttgag 429

<210> 498
 <211> 385
 <212> DNA
 <213> Homo sapiens

<400> 498
 ggtggaaaaa gtttgagaga aggaggagg aaaaggtgtc ctggctagca ccatgtggat 60
 tctcttgaga tgagaagaaa atgcccggt acgtcccct tctgtgtctc ctgcttctcc 120
 tgagggtgtc acaacggggt ggaggagtta attttgggtg gaaggatgca aaagtccccg 180
 ggacctggag agatggagtc aggtccctg gagaaggagc ctcttgggac tcagacaggg 240
 ccagtccctga gcgaagggtac ggaatagggt agtgaacctt gggaaactccg gacctgtta 300
 tctaccctca atcacctgcc acaggaggc agggacccca gcgtctttct catataccct 360
 ttttaaggaaa tgctctgctt ttgat 385

<210> 499
 <211> 533
 <212> DNA
 <213> Homo sapiens

<400> 499
 gattagttaa aattatcata aaagtgttg aaaatcttta acttgcatgt aaatttggaa 60
 ttctgaaaaa ttcataaata ccctgccagt atctatgaaa ggaaaagctg cagatccgac 120
 tatataccaa taatccattt ttctaaaagt tcagagaaac tctgtagctc attattcctg 180

ggatataagg	taatcctggc	tgggttatga	aattttctct	catgtctctt	ccctatagac	240
atctcttttg	tatcactcag	gctattcttt	ctgaaatagc	tgaaggattt	agaaacgac	300
cattcaaatt	ttatctttat	tctgttcttg	cccttttctt	ccactattat	atgtatgttt	360
ttgtttcaag	gttcagtatc	tactacttaa	agttacttag	aatttttaag	ttttccta	420
ataaacaagc	atgtgaaaga	aactacttta	attgttatga	tgactaaact	tgtctcaaac	480
caaaaatatg	cgctaaacac	tacgtagtaa	gaatgagacc	agcctgggca	aca	533

<210> 500
 <211> 744
 <212> DNA
 <213> Homo sapiens

<400> 500						
ggctattaca	tagaaat	gtagaatcta	ataagataaa	ctagaacat	gacatgttca	60
gctgttttct	ctacgaataa	acaaattggc	gctaaaactg	gtcttgctat	ctagatttct	120
agttatatct	cagttatctt	ttccccacat	gggatgtgaa	agtaatgtta	tatgctttct	180
tatgtacgta	cttttgactt	aggtcagctc	ccacactgca	ttaaaattac	taatgagaca	240
aattgcagtt	ttccagaggt	tcattgttcc	atttctcctt	ccttggcttt	cctgcatttt	300
tagctccagt	caaaattcta	tttattatgt	atcaactttt	ataaaatgct	tggctttgaa	360
aagtataatt	aaaagacaaa	gatctgaaat	taattagcggg	tttttagcta	tctatcatgc	420
attaagaaat	caagtgaacca	ggtgtggtgg	cctgtaatcc	tatcactttg	ggaggctgaa	480
gtgggaggac	cacttgagct	caggagtcca	agaccagcct	gggcaacata	gcaagaccct	540
gtctctacta	aaaataaaaa	aaattgacca	ggtgggggtg	tgcatgcctg	tagttccagc	600
tacttgggaa	cgcctagggg	ggaaagaatg	gttgggcccc	cgaggggggg	aaatacacag	660
aggctttggg	gggccccccac	cggccattat	aactgggggg	gaaaaggggg	gccccccccc	720
ccttcctttt	ttttttttta	ttaa				744

<210> 501
 <211> 337
 <212> DNA
 <213> Homo sapiens

<400> 501						
agaactgttt	gtggaaaaca	acgggggtca	cttacgacat	gcctagaagg	acaagagggg	60
gatttgggct	gtgcaatgcc	cacaaaagtt	gccagaagta	cttatcatct	ttgaaattat	120
ccactttgtt	atcccctttg	ctgggtgttc	ctttttatac	cccatctctt	aaaggatggg	180
gcattttttg	tttgagggtt	tattttatgg	taattatagc	cgactgtaac	ctgttcaaaa	240
taataattta	ggagctcttc	tagagtggg	aatgctgaga	atttttaaaa	attactaaaa	300
cttgaatag	ctttttcaaa	tgccaaagca	gatttgg			337

<210> 502
 <211> 412
 <212> DNA
 <213> Homo sapiens

<400> 502						
accacgcgtc	cgggtgaaat	gttaaccctc	tcattagatc	tactagttta	tcctgttgat	60
tctattgtgt	tttctatgta	aatgattttg	tcagctataa	ataataacat	tttattttct	120
ctttccttgc	aatacctatg	ctcatttatt	ttttatgttt	acctattggg	tagggcctcc	180
tgtatacatt	aaacagttca	tagtcatgat	agtgagtatt	cttacctgt	tcccagtatt	240
acaggggaatg	cttagaaatt	ttctttat	aaacattatg	tttggttag	ccttggttaa	300
ggctatttta	taatttttac	tagaaatatt	ttgacattta	ttgggatttt	tttctatctc	360
taatctattg	agataggcac	attccttttg	cttcaactcca	ttataaagg	ag	412

<210> 503
 <211> 852
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1) ... (852)
 <223> n = a,t,c or g

<400> 503
 atgagccnnt tgacttgatc gcctgcttgg actagggcct gattcacaga cgctccagga 60
 tggagcgggg cgcaggagcc aagctgctgc cgctgctgct gcttctgcgg gcgactgggt 120
 tcacatgtgc acaggcagat ggccggaacg gctacacggc ggtcatcgaa gtgaccagcg 180
 ggggtccctg gggcgactgg gcctggcctg agatgtgtcc cgatggattc ttcgccagcg 240
 gggtctcgct caagggttgg gctcaggcgt aggtccctgga gagggcggag atgctgtgga 300
 ccatagagcc aaggatgata attccgtgac tcgcccttgc ccctctctc gataccagg 360
 tggagcctcc ccaaggcatt cctggcgacg aactgcaact gaatgggac aggctgcact 420
 gcgcgcgcgg gaacgtccta ggcaatacgc acgtggtaga gtcccagtct ggaagctggg 480
 gcgaatggag tgagccgctg tgggtgtcgc gcggcgcccta cctagtggct ttctcgttc 540
 gcgtggaggc acccagcacc ctcggtgaca acacagcagc gaacaacgtg cgcttccgct 600
 gttcagacgg cgaggaactg caggggcctg ggctgagctg gggagacttt ggagactgga 660
 gtgaccattg ccccaagggc gcgtgcggcc tcgagaccaa gatccaggga cctagaggcc 720
 tcggcgatga cactgcgctg aacgacgcgc gcttattctg ctgccgcaag ttgtaaagcg 780
 ccggcgccgc cgctcatctc cacgggcccag gaggctagtc ccacctcttg ctattaaagc 840
 ttctctgagt tg 852

<210> 504
 <211> 407
 <212> DNA
 <213> Homo sapiens

<400> 504
 cacagtaaaa gagctctaga acctgggtcc tagtttgttc ctataaatat gacgcaagtg 60
 gagagagtga tcgtgttcct gacctgagt actttgagcc ttgctaagac caccagccc 120
 atcttcatgg actcatatga aggacaagaa gtgaacataa cctgtagcca caacaacatt 180
 gttacaaatg attatatcac gtggtaccaa cagtttccca gccaggacc acgatttatt 240
 attcagggat accagaaaaa agttaccaac gaagtggcct tcctgtgtat ccctgccgac 300
 agaaagtcca tcactctgaa cctgccccgg gtttctctag aagacactgg tgggaaataa 360
 ctgcttgtgg gtgatagaca caatgattag ttttgggagc ccgaacc 407

<210> 505
 <211> 404
 <212> DNA
 <213> Homo sapiens

<400> 505
 aacatccggg ccgcgcgggg aaggggagac gtggggtaga gtgaccatga cgaaattagc 60
 gcagtggcct tggggactag cgatccctgg ctccacctgg gtggccctga ccacgggagc 120
 cttgggcctg gagctgcctt tgcctgccca ggaagtccct tggeccactgc ccgcctactt 180
 gctggtgtcc gccggctgct atgcctggg cactgtgggc tategtgtgg ccacttttca 240
 tgactgcgag gacgccgcac gcgagctgca gagccagata caggaggccc gagccgactt 300
 agcccgcagg gggctgcgct tctgacagcc taacccatt cctgtgcgga cagcccttcc 360
 tcccatttcc cattaaagag ccagtttatt ttctaaaaaa aaaa 404

<210> 506
 <211> 1868
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)...(1868)
 <223> n = a,t,c or g

<400> 506
 cataagggttg tagtagcagg agccctctat cttttgttcg ggnncatgga aggggtcctc 60
 anagcnnng agactcagac tgatcttgct tacttggcct ttatcccctt ggctttccta 120
 gaccttggcc tgcgcagctg ggtgcagaca acatccccc accaccaag agggagggtta 180
 gctcttcgcg caccaggggc aagcacattt gtatcgcat ttcaccaaca cgcttatttt 240
 ggcagtggca gcatccattg tgtttatcat ctggacaacc atgaagttca gaatagtgc 300
 atgtcagtcg gactggcggg agctgtgggt agacgatgcc atctggcgct tgctgttctc 360
 catgacctc tttgtcatca tggttctctg gcgaccatct gcaaaacaacc agagggtttgc 420
 cttttcacca ttgtctgagg aagaggagga ggatgaacaa aaggagccta tgctgaaaga 480
 aagctttgaa ggaatgaaaa tgagaagtac caaacaagaa cccaatggaa atagtaaagt 540
 taacaaagca caggaagatg atttgaagtg ggtagaagag aatgttccctt cttctgtgc 600
 agatgtagca cttccagccc ttctggattc agatgaggaa cgaatgatca cacactttga 660
 aagttccaaa atggagtaag gaatgggaag atttgagtt aaagatggct accatcaggg 720
 aagagatcag catctgtgtc agtcttctgt acggctccat gggattaaag gaagcaatga 780
 catctgatc tgttccttga tctttgggca ttggagtgg cgagaggtgt cagaacaaag 840
 agaacatctt actgaaaaca agttcataag atgagaaaaa tctacgagct tcttatttac 900
 aacactgctg cccctttcc tcccagactc tgacatggat gttcatgcaa ctttaagtgtg 960
 ttgttcctga actttctgta atgtttcatt ttttaaatct gacaaactaa aaagttaac 1020
 gtcttctaaa agattgtcat caacaccata atatgtaate tccaggagca actgcctgta 1080
 atttttattt atttagggag ttacataggt gatgggggaa attgttaact acctttcatt 1140
 ttcttgaggaa gtcaagggtta catcttgcat aggttgtttt gagaaaaaag ggcccttctg 1200
 agttaaggag ccatagttct atcaatgatc aaaagaaaaa aaaaaaaaag agaaactgtt 1260
 acagtatgat tcagatcatt taaaaaagca aaatcaagtg caattttgtt taaaaatggt 1320
 gtatattaaa gatttttcta ttccagatgt actttaaaga gaaatattag ctttaactctt 1380
 ttgacatctg ctattgtgac acatcccatt gctggcaatg tgggtgcacac tccgaaactt 1440
 ttaactactg ttttgtaagc ctccaagggt ggcattgcag ggtccttagg caatgttttg 1500
 tttgccttta tggcagagag gtgctccaag tgctgtgatt gagcaccgtg ctgaggaac 1560
 tgtaatgctt cagaagttgt agcttataca aaggaaacag gtcctgctgg ctttaattta 1620
 acagttattg catgaagtag cgtggaggcc ctggactgct gctcgttctt taggatggac 1680
 tggttctggt atctggtatt gggtttagag actgttaata agggacatca caaggtgatg 1740
 gggattcatt tgaagcactc tatttctgtt ttaatgggtt tatccaattt tgccttccca 1800
 agatttttgt tctacataaa aagttcatgc cactttttaa tataaaaaaa ttttaacaaa 1860
 aaaaaaaa 1868

<210> 507
 <211> 1073
 <212> DNA
 <213> Homo sapiens

<400> 507
 ctctggggca ggtgttggtg ctggtgctgg tggccgctct gtgggggtggc acgcagccgc 60
 tgctgaagcg ggcctccgccc ggctgcagc gggttcatga gccgacctgg gccagcagt 120
 tgctacagga gatgaagacc ctcttcttga atactgagta cctgatgccc tttctcctca 180
 accagtgtgg atcccttctc tattacctca ccttggcatc gacagatctg accctggctg 240
 tgccccatctg taactctctg gctatcatct tcacactgat tggttggaag gcccttggag 300
 aagatattgg tggaaaacga gcagttgctg gcatgggtgct caccgtgata ggaatttcac 360
 tctgcatcac aagctcagtg agtaagacc aggggaaca gtctaccctt tgagtgggccc 420
 gaaccactt ccagctctgc tgcctccagg aagcccctgg gccatgaagt gctggcagtg 480
 agcggatgga cctagcactt cccctctctg gccttagctt cctcctctct tatggggata 540

acagctacct	catggatcac	aataagagaa	caagagtga	agagttttgt	aaccttcaag	600
tgctgttcag	ctgcggggat	ttagcacagg	agactctacg	ctcaccctca	gcaacctttc	660
tgccccagca	gctctcttcc	tgctaacatc	tcagggtccc	agcccagcca	ccattactgt	720
ggcctgatct	ggactatcat	ggtggcaggt	tcccatggac	tgacagaactc	cagctgcatg	780
gaaagggcca	gctgcagact	ttgagccaga	aatgcaaacg	ggaggcctct	gggactcagt	840
cagagcgctt	tggtggaatg	aggggtggaa	ccgagggaa	aaggtgcgtc	ggagtggcag	900
atgcaggaaa	tgagctgtct	attagccttg	cctgccccac	ccatgaggta	ggcagaaatc	960
ctcactgcca	gcccccttta	aacaggtaga	gagctgtgag	ccccagcccc	acctgactcc	1020
agcacacctg	gcgagtagta	gctgtcaata	aatctatggt	aaacagacaa	aaa	1073

<210> 508

<211> 1073

<212> DNA

<213> Homo sapiens

<400> 508

ctctggggca	ggtgttggt	ctggtgctgg	tgcccgctct	gtgggggtggc	acgcagccgc	60
tgctgaagcg	ggcctccgcc	ggcctgcagc	gggttcatga	gccgacctgg	gcccagcagt	120
tgctacagga	gatgaagacc	ctcttcttga	atactgagta	cctgatgccc	tttctcctca	180
accagtgtgg	atcccttctc	tattacctca	ccttggcatc	gacagatctg	accctggctg	240
tgcccatctg	taactctctg	gctatcatct	tcacactgat	tggtgggaag	gcccttggag	300
aagatattgg	tggaataacga	gcagttgctg	gcattggtgt	caccgtgata	ggaatttcac	360
tctgcatcac	aagctcagtg	agtaagaccc	aggggcaaca	gtctaccttt	tgagtgggcc	420
gaacccactt	ccagctctgc	tgctccagg	aagccccctg	gccatgaagt	gctggcagtg	480
agcggtatga	cctagcactt	ccccctctct	gccttagctt	cctcctctct	tatggggata	540
acagctacct	catggatcac	aataagagaa	caagagtga	agagttttgt	aaccttcaag	600
tgctgttcag	ctgcggggat	ttagcacagg	agactctacg	ctcaccctca	gcaacctttc	660
tgccccagca	gctctcttcc	tgctaacatc	tcagggtccc	agcccagcca	ccattactgt	720
ggcctgatct	ggactatcat	ggtggcaggt	tcccatggac	tgacagaactc	cagctgcatg	780
gaaagggcca	gctgcagact	ttgagccaga	aatgcaaacg	ggaggcctct	gggactcagt	840
cagagcgctt	tggtggaatg	aggggtggaa	ccgagggaa	aaggtgcgtc	ggagtggcag	900
atgcaggaaa	tgagctgtct	attagccttg	cctgccccac	ccatgaggta	ggcagaaatc	960
ctcactgcca	gcccccttta	aacaggtaga	gagctgtgag	ccccagcccc	acctgactcc	1020
agcacacctg	gcgagtagta	gctgtcaata	aatctatggt	aaacagacaa	aaa	1073

<210> 509

<211> 2027

<212> DNA

<213> Homo sapiens

<400> 509

tccccacgg	agacgcgcca	aggtagcccc	gcgcgtgtcc	gtaggcgccg	tctctggaag	60
acgcggtggg	gggtgcgcag	ggctgcaccc	tcacaccaat	tgccccggcg	aaggccgagc	120
ccagaaagtg	agtgcgcgtg	agtgtgcgcg	cgcccgcatg	cgggggcggtg	gcagtcaaca	180
gcaacaaccc	acacgcggcg	agggccagaa	actcccatct	ccctcaccag	ccggaaagta	240
cgagtcggct	cagcctggag	ggacccaacc	agagcctggc	ctgggagcca	ggatggccat	300
ccacaaagcc	ttggtgatgt	gcctgggact	gcctctcttc	ctgttcccag	gggcctgggc	360
ccaggggccat	gtcccacccg	gctgcagcca	aggcctcaac	ccccgtact	acaacctgtg	420
tgaccgctct	ggggcggtgg	gcacgtctct	ggaggccgtg	gctggggcgg	gcattgtcac	480
caagttttgt	ctcaccatca	tcctgggtgg	cagcctcccc	tttgtgcagg	acaccaagaa	540
acggagcctg	ctggggaccc	aggtattctt	ccttctgggg	accctgggcc	tcttctgect	600
cgtgttttgc	tggtgtggaga	agcccgaact	ctccacctgt	gcctctcggc	gcttctcttt	660
tggggtttctg	ttcgccatct	gcttctcttg	tcggcggtct	cagctctttg	ccctcaactt	720
cctggccccg	aagaaccacg	ggccccgggg	ctgggtgatc	ttcactgtgg	ctctgctgct	780
gaccctggta	gaggtcatca	tcaatacaga	gtggctgatc	atcacccctg	ttcggggcag	840
tggcgagggc	ggccctcagg	gcaacagcag	cgcaggctgg	gccgtggcct	ccccctgtgc	900
catcgccaac	atggactttg	tcattggcact	catctacgtc	atgctgctgc	tgctgggtgc	960
cttctctggg	gcctggcccc	ccctgtgtgg	ccgctacaag	cgctggcgta	agcatggggg	1020

ctttgtgctc	ctcaccacag	ccacctccgt	tgccatatgg	gtgggtgtgga	tcgtcatgta	1080
tacttacggc	aacaagcagc	acaacagtc	cacctgggat	gaccccaagc	tggccatcgc	1140
cctcgccgcc	aatgcctggg	ccttcgtcct	cttctacgtc	atccccgagg	tctcccaggt	1200
gaccaagtcc	agcccagagc	aaagctacca	gggggacatg	tacccacccc	ggggcggtggg	1260
ctatgagacc	atcctgaaag	agcagaagg	tcagagcatg	ttcgtggaga	acaaggcctt	1320
ttccatggat	gagccggttg	cagctaagag	gccggtgtca	ccatacagcg	ggtacaatgg	1380
gcagctgctg	accagtgtgt	accagcccac	tgagatggcc	ctgatgcaca	aagttccgct	1440
cgaaggagct	tacgacatca	tcctcccacg	ggccaccgcc	aacagccagg	tgatgggcag	1500
tgccaaactcg	accctgcggg	ctgaagacat	gtactcggcc	cagagccacc	aggcggccac	1560
accgcccga	gacggcaaga	actctcaggt	ctttagaaac	ccctacgtgt	gggactgagt	1620
cagcgggtggc	gaggagaggc	ggtcggattt	ggggagggcc	ctgaggacct	ggccccgggc	1680
aagggaactct	ccaggctcct	cctccccctg	gcaggcccag	caacatgtgc	cccagatgtg	1740
gaagggcctc	cctctctgcc	agtgtttggg	tgggtgtcat	gggtgtcccc	acccactcct	1800
cagtgtttgt	ggagtgcagg	agccaacccc	agcctcctgc	caggatcacc	tcggcggtca	1860
cactccagcc	aaatagtgtt	ctcgggggtg	tggctgggca	gcgcctatgt	ttctctggag	1920
attcctgcaa	cctcaagaga	cttcccaggc	gctcaggcct	ggatcttgct	cctctgtgag	1980
gaacaagggt	gcctaataaa	tacatttctg	ctttattaaa	aaaaaaa		2027

<210> 510
 <211> 459
 <212> DNA
 <213> Homo sapiens

<400> 510						
ggcagcagct	tatatggtta	aaacagagcg	acacctaaaa	aaccctccct	ttgtccctt	60
taggggttat	acattgaccc	tatcattggt	attgaaattg	tcacattact	cttgtctttg	120
ggttaaaaaa	gactttaaag	actcctcgtt	ttacaatagc	aataataata	gcaatagcaa	180
tattgtataa	tctttattga	gcactcacta	tatgccaggc	gctgtaatta	gtaatttatg	240
ccttatctca	tgtaaagttt	ccagcagccc	tattaagcag	acacatggca	tttccatgtt	300
acagatgaag	agactgaaac	acacattagc	tcgccttgcc	ccagggacac	atgggtggag	360
ccagaactag	gagttgagcc	caggcatact	gatgcctggg	gcacttggac	gctgctgtac	420
agccactcca	ggtgtggatg	agcaggaaac	acattgaag			459

<210> 511
 <211> 1902
 <212> DNA
 <213> Homo sapiens

<400> 511						
gttccacctg	gcggtgggt	ctcagtcctc	tcgtgtagt	cgcggagctg	tgtctgttcc	60
caggagtcc	tcggcggtg	ttgtgtcagt	ggcctgatcg	cgatggggac	aaaggcgcaa	120
gtcgagagga	aactgttgtg	cctcttcata	ttggcgatcc	tggtgtgtc	cctggcattg	180
ggcagtgtta	cagtgcactc	ttctgaacct	gaagtcagaa	ttcctgagaa	taatcctgtg	240
aagtgttcct	gtgcctactc	gggcttttct	tctccccgtg	tggagtggaa	gtttgaccaa	300
ggagacacca	ccagactcgt	ttgctataat	aacaagatca	cagcttccta	tgaggaccgg	360
gtgaccttct	tgccaactgg	tatcaccttc	aagtccgtga	cacgggaaga	cactgggaca	420
tacacttgta	tggtctctga	ggaaggcggc	aacagctatg	gggaggtcaa	ggtcaagctc	480
atcgtgcttg	tgccctccatc	caagcctaca	gttaacatcc	cctcctctgc	caccattggg	540
aaccgggcag	tgctgacatg	ctcagaacaa	gatggttccc	caccttctga	atacacctgg	600
ttcaaagatg	ggatagtgtat	gcctacgaat	cccaaaaagca	cccgtgcctt	cagcaactct	660
tcctatgtcc	tgaatcccac	aacaggagag	ctggctcttg	atccccgtgc	agcctctgat	720
actggagaat	acagctgtga	ggcacggaat	gggtatggga	cacccatgac	ttcaaagtct	780
gtgcgcacatg	aagctgtgga	gcggaatgtg	ggggtcacatg	tggcagccgt	ccttgtaacc	840
ctgattctcc	tgggaatcct	ggtttttggc	atctggtttg	cctatagccg	aggccacttt	900
gacagaacaa	agaaagggac	ttcgagtaag	aaggtgattt	acagccagcc	tagtgcccga	960
agtgaaggag	aattcaaaac	gacctcgtca	tcctggtgtg	gagcctgggc	ggctcacccg	1020
ctatcatctg	catttgccct	actcaggtgc	taccggactc	tggccctga	tgtctgtagt	1080
ttcacaggat	gccttatttg	tcttctacac	cccacagggc	cccctacttc	ttcggtatgtg	1140

tttttaataa	tgtcagctat	gtgccccatc	ctccttcatg	ccctccctcc	ctttcctacc	1200
actgctgagt	ggcctggaac	ttgtttaaag	tgtttattcc	ccatttcttt	gagggatcag	1260
gaaggaatcc	tgggtatgcc	attgacttcc	cttctaagta	gacagcaaaa	atggcggggg	1320
tcgcaggaat	ctgcactcaa	ctgcccacct	ggctggcagg	gatctttgaa	taggtatctt	1380
gagcttggtt	ctgggctctt	tccttgtgta	ctgacgacca	gggccagctg	ttctagagcg	1440
ggaattagag	gctagagcgg	ctgaaatggt	tgtttgggtg	tgacactggg	gtccttccat	1500
ctctggggcc	cactctcttc	tgtcttccca	tgggaagtgc	cactgggatc	cctctgccct	1560
gtcctcctga	atacaagctg	actgacattg	actgtgtctg	tggaaaatgg	gagctcttgt	1620
tgtggagagc	atagtaaatt	ttcagagaac	ttgaagccaa	aaggatttaa	aaccgctgct	1680
ctaaagaaaa	gaaaactgga	ggctgggcgc	agtggctcac	gcctataatc	ccagaggctg	1740
aggcaggcgg	atcacctgag	gtcaggagtt	caagatcagc	ctgaccaaca	tggagaaacc	1800
ctactaaaaa	tacaaagtta	gccaggcatg	gtggtgcatg	cctgtaatcc	cagctgctca	1860
ggagcctggc	aacaagagca	aaactccagc	tcaaaaaaaaa	aa		1902

<210> 512

<211> 1902

<212> DNA

<213> Homo sapiens

<400> 512

gttccacctg	ggcgctggct	ctcagtcctc	tcgctgtagt	cgcgagctg	tgtctgttcc	60
caggagtcc	tcggcggtcg	ttgtgtcagt	ggcctgatcg	cgatggggac	aaaggcgcaa	120
gtcagagagga	aactgtttgt	cctcttcata	ttggcgatcc	tggtgtgtct	cctggcattg	180
ggcagtgtta	cagtgcactc	ttctgaacct	gaagtcagaa	ttcctgagaa	taatcctgtg	240
aagttgtcct	gtgcctactc	gggcttttct	tctcccctg	tggagtggaa	gtttgaccaa	300
ggagacacca	ccagactcgt	ttgtataat	aacaagatca	cagcttccta	tgaggaccgg	360
gtgaccttct	tgccaactgg	tatcaccttc	aagtccgtga	cacgggaaga	cactggggaca	420
tacacttgta	tggctctctg	ggaaggcggc	aacagctatg	gggaggtcaa	ggtcaagctc	480
atcgctgttg	tgccctccat	caagcctaca	gttaacatcc	cctcctctgc	caccattggg	540
aaccgggcag	tgctgacatg	ctcagaacaa	gatggttccc	caccttctga	atacacctgg	600
ttcaaagatg	ggatagtgat	gcctacgaat	cccaaaagca	cccgtgcctt	cagcaactct	660
tcctatgtcc	tgaatccac	aacaggagag	ctggctcttg	atcccctgtc	agcctctgat	720
actggagaat	acagctgtga	ggcacggaat	gggtatggga	cacccatgac	ttcaaatgct	780
gtgcgcatgg	aagctgtgga	gcggaatgtg	ggggctcatg	tggcagccgt	ccttgtaacc	840
ctgattctcc	tgggaatctt	ggtttttggc	atctgggttg	cctatagccg	aggccacttt	900
gacagaacaa	agaaagggac	ttcgagtaag	aaggtgatgt	acagccagcc	tagtgcccga	960
agtgaaggag	aattcaaaa	gacctcgtca	ttcctgggtg	gagcctggtc	ggctcaccgc	1020
ctatcatctg	catttgctt	actcaggtgc	taccggactc	tggcccctga	tgtctgtagt	1080
ttcacaggat	gccttatttg	tcttctacac	cccacagggc	cccctaactc	ttcggatgtg	1140
tttttaataa	tgtcagctat	gtgccccatc	ctccttcatg	ccctccctcc	ctttcctacc	1200
actgctgagt	ggcctggaac	ttgtttaaag	tgtttattcc	ccatttcttt	gagggatcag	1260
gaaggaatcc	tgggtatgcc	attgacttcc	cttctaagta	gacagcaaaa	atggcggggg	1320
tcgcaggaat	ctgcactcaa	ctgcccacct	ggctggcagg	gatctttgaa	taggtatctt	1380
gagcttggtt	ctgggctctt	tccttgtgta	ctgacgacca	gggccagctg	ttctagagcg	1440
ggaattagag	gctagagcgg	ctgaaatggt	tgtttgggtg	tgacactggg	gtccttccat	1500
ctctggggcc	cactctcttc	tgtcttccca	tgggaagtgc	cactgggatc	cctctgccct	1560
gtcctcctga	atacaagctg	actgacattg	actgtgtctg	tggaaaatgg	gagctcttgt	1620
tgtggagagc	atagtaaatt	ttcagagaac	ttgaagccaa	aaggatttaa	aaccgctgct	1680
ctaaagaaaa	gaaaactgga	ggctgggcgc	agtggctcac	gcctataatc	ccagaggctg	1740
aggcaggcgg	atcacctgag	gtcaggagtt	caagatcagc	ctgaccaaca	tggagaaacc	1800
ctactaaaaa	tacaaagtta	gccaggcatg	gtggtgcatg	cctgtaatcc	cagctgctca	1860
ggagcctggc	aacaagagca	aaactccagc	tcaaaaaaaaa	aa		1902

<210> 513

<211> 1263

<212> DNA

<213> Homo sapiens

<400> 513
 atgggactgc agagccagc tgcctctatg ctgccctatt cgacttccaa tcagccagct 60
 gcctctacac tgccttattc gacttccaat cagccagctg cgtctacact gccctattcg 120
 acttccaatc agccagctgc ctctacactg ccctattcgt cttccaatca gccagctgcg 180
 tctacactgc cctattcgac ttccaatcag ccagctgcct ctacactgcc ctattcgact 240
 tccaatcagc cagctgcgtc tacactgccc tattcgactt ccaatcagcc agctgcctct 300
 aactgccttc attcgacttc caatcagcca gctgcgtcta cactgcccta ttcgacttcc 360
 aatcagccag ctgcgtctac actgccctgt tcaacttcca gtcaccacag cttattcctt 420
 gtggcctctg cgggtcctgc ctcagccatg atgatccag gcttccagag cagccaccgg 480
 gattttctgt tcgggcccctg gaagctgacg gcgtccaaga cccacatcat gaagtcggcg 540
 gatgtggaga aattagccga tgaattacat atgccatctc tccctgaaat gatgtttgga 600
 gacaacggtt taagaatcca gcatgggtct ggctttggaa ttgagttcaa tgctacagat 660
 gcgttaagat gtgtaaacia ctaccaagga atgcttaaaag tggcctgtgc tgaagagtgg 720
 caagaaagca ggacggaggg tgaacactcc aaagaggtta ttaaaccata tgattggacc 780
 tatacaacag attataaggg aaccttactt ggagaatctc ttaagttaaa gggtgtacct 840
 acaacagatc atatatagatc agaaaaattg aaagccagag aacagattaa gtttttgaa 900
 gaagtctctc tttttgagga tgaacttcat gatcatggag tttcaagcct gagtgtgaag 960
 attagagtaa tgccttctag ctttttctct ctgttgcggt ttttcttgag aattgatggg 1020
 gtgcttatca gaatgaatga cagcagactt taccatgagg ctgacaagac ctacatgtta 1080
 cgagaatata cgtcacgaga aagcaaaatt tctagtttga tgcagtgtcc accttccctc 1140
 ttcaacggaac ctaatgaaat atcccagtat ttaccaataa aggaagcagt ttgtgagaag 1200
 ctaatatattc cagaaagaat tgatcctaac ccagcagact cacaaaaaag tacacaagtg 1260
 gaa 1263

<210> 514
 <211> 3200
 <212> DNA
 <213> Homo sapiens

<400> 514
 tttcgtgtgg cgggtgctga ggcggttggg cctagggtgc agcgggcgcg tctgcggctg 60
 gtgttgggcg atctctagat cctttcccgg agttcagtta tgggtgtgag aggtttgcaa 120
 ggatttgtgg gaagtacctg cccacatata tgtacagtag taaatttcaa agaactggca 180
 gagcaccacc gaagcaagta tcctggatgt acccctacca ttgtggttga tgccatgtgt 240
 tgtctcagat attggtatc tccagaatct tggatctgcy gtggccagtg gcgagaatac 300
 ttttctgctt tgcgagattt tgttaaaact tttacggcag ctgggatcaa gttgatattc 360
 ttctttgatg gcatggtgga gcaggataag agagatgaat gggtgaaacg aaggctcaag 420
 aacaacaggg agatatccag gatttttcat tacatcaagt cacacaagga gcagccaggc 480
 agaaatatgt tcttcatccc ctcagggtca gctgtgttta cacgatttgc tctaaagaca 540
 ctgggcccag aaactttgtg ttcttgcag gaagcagatt atgaggtagc ttcctatggc 600
 ctccagcata actgtcttgg gattctgggg gaagacactg attacctaat ctatgacact 660
 tgtccctact tttcaattag cgaactctgc ctagagagcc tggacaccgt catgctctgc 720
 agagagaagc tctgtgagag tctgggccc cgtgtggcgg accttccctc tctggcctgc 780
 ctcttggga acgacataat cccagagggc atgtttgaaa gctttaggta caaatgctta 840
 tcgtcctaca cctctgtaaa agagaacttt gacaaaaaag gtaacatcat attagctgtg 900
 tcagaccata tatcgaaagt tctttacttg tatcaagggt agaaaaaatt agaagagata 960
 ttacctctg gaccaaacia agctcttttt tataaaggaa tggcatcata tcttttacca 1020
 ggacaaaaat ctccatggtt tttccaaaaa cccaaagggt taataacttt ggacaaacia 1080
 gtaatatcca cgagttcaga cgcgaatcc agggagaag ttcccatgtg ttcagatgct 1140
 gaatccaggc aagaagttcc catgtgtaca ggcctgaat ccaggcgaga agttcccgtg 1200
 tatacatatt ctgaaccag gcaagaagt cccacgtgtt cagaccctga acccaggcaa 1260
 gaagtcccca cgtgtacagg cctgaatcc aggcgagaag ttcctatgtg ttcagacctt 1320
 gaaccaggc aagaagttcc catgtgtaca ggcctgaac ccaggcaaga agttcccatg 1380
 tgtacaggcc ctgaagccag gcaagaagt cccatgtgta cagactctga acccaggcaa 1440
 gaagtcccca tgtgtacaga ctctgaaccc aggcagaag ttcctatgta tacaggctct 1500
 gaaccaggc aagaagttcc catgtatata ggcctgaat ccaggcaaga agttcccatg 1560
 tatacaggcc ctgaatccag gcaagaagt ttaatacggc cagaccctga atctaggcaa 1620
 gaaattatgt gtacaggcca tgaatccaaa caggaagttc ccatatgtac agatcctata 1680
 tccaagcaag aagactccat gtgtacacac gctgaaatca atcaaaaaat acctgtagca 1740
 acagattttg aatttaagct agaagctctc atgtgtacaa accctgaaat taaacaagaa 1800
 gaccccaaaa atgtggggcc tgaagtaaa caacaagtaa ccatggtttc agacactgaa 1860

atcttaaagg	ttgctagaac	acatcacgtc	caagcagaaa	gctacctggt	gtacaacatc	1920
atgagcagtg	gagagattga	atgcagcaac	accctagaag	atgagcttga	ccaggcctta	1980
cccagccagg	ccttcattta	ccgtcccat	cgacagcggg	tctactcact	cttactggag	2040
gactgtcaag	atgtcaccag	cacctgccta	gctgtcaagg	agtggtttgt	gtatcctggg	2100
aaccactga	ggcaccggga	cctcgtcagg	ccgctgcaga	tgaccattcc	agggggaacg	2160
cctagtttga	aaatattatg	gctgaaccaa	gagccagaaa	tacaggttcg	gcgcttgga	2220
acactcctag	cctgtttcaa	tctttcctcc	tcaagagaa	agctgcaggc	tgctgaaagc	2280
ccatttcaag	ctttgtgctg	cctcttgatc	tacctctttg	tccagggtga	cacgctttgc	2340
ctggaggatt	tgcatgcgtt	tattgcgcag	gccttggtcc	tccaaggaaa	atccacctcg	2400
cagcttgtaa	atctacagcc	tgattacatc	aacccagag	ccgtgcagct	gggctccctt	2460
ctcgtccgcg	gcctcaccac	tctggtttta	gtcaacagcg	catgtggctt	cccctggaag	2520
acgagtgaat	tcatgccctg	gaatgtat	gacgggaagc	tttttcatca	gaagtacttg	2580
caatctgaaa	agggttatgc	tgtggagggt	cttttagaac	aaaatagatc	tcggctcacc	2640
aaattccaca	acctgaaggc	agtcgtctgc	aaggcctgca	tgaaggagaa	cagacgcac	2700
actggccgag	cccactgggg	ctcacaccac	gcaggggagt	ggggaagaca	gggctccagc	2760
taccacagga	cggtctctgg	gtatagccgt	tccagtcagg	gacagccgtg	gagagaccag	2820
ggaccaggaa	gcagacagta	tgagcatgac	cagtggagaa	ggtactagtc	aacctccaga	2880
aagagtatgg	agagaaaaag	aggcacacct	ggacgcagag	ccctgccagc	gccctcctct	2940
gctgttcgag	ctgcaaggag	accatgcctg	tgggagccag	gcctcgcttg	catgaagaag	3000
gaacgatgcc	tttttcaatg	gtgtctccct	cccattgtgc	agaagagctt	ttgttggtt	3060
ctctcccgag	cttgtgcctg	attctgtggc	ccaaaacaat	cattgttaac	atcttcatgt	3120
gtttcattct	gatcttcat	tcatatatat	gatgcctagc	taatttcatt	ttaaaataaa	3180
tgggaatctg	ttgtaaaaaa					3200

<210> 515

<211> 3200

<212> DNA

<213> Homo sapiens

<400> 515

tttcgtgtgg	cggtggctga	ggcggttggg	cctaggggtgc	agcggggcgcg	tctgcggctg	60
gtgttggcgc	atctctagat	cctttcccg	agttcagtta	tgggtgtgag	agggttgcaa	120
ggatttgtgg	gaagtacctg	cccacatata	tgtacagtag	taaatttcaa	agaactggca	180
gagcaccacc	gaagcaagta	tcctggatgt	acccctacca	ttgtggttga	tgccatgtgt	240
tgtctcagat	attggtatac	tcagaatct	tggatctgcg	gtggccagtg	gcgagaatac	300
ttttctgctt	tgcgagattt	tgttaaaact	tttacggcag	ctgggatcaa	gttgatattc	360
ttctttgatg	gcattgtgga	gcaggataag	agagatgaat	gggtgaaacg	aaggctcaag	420
aacaacaggg	agatatccag	gatttttcat	tacatcaagt	cacacaagga	gcagccaggc	480
agaaatatgt	tcttcatccc	ctcagggtca	gctgtgttta	cacgatttgc	tctaaagaca	540
ctggggccagg	aaactttgtg	ttccttgacg	gaagcagatt	atgaggtagc	ttcctatggc	600
ctccagcata	actgtcttgg	gattctgggg	gaagacactg	attacctaat	ctatgacact	660
tgtccctact	tttcaattag	cgagctctgc	ctagagagcc	tggacaccgt	catgctctgc	720
agagagaagc	tctgtgagag	tctgggcctc	tgtgtggccg	accttccctc	tctggcctgc	780
ctccttggca	acgacataat	cccagagggc	atgtttgaaa	gcttttaggt	caaagtctta	840
tcgtcctaca	cctctgtaaa	agagaacttt	gacaaaaaag	gtaacatcat	attagctgtg	900
tcagaccata	tatcgaaagt	tctttacttg	tatcaagggt	agaaaaaatt	agaagagata	960
ttacctctgg	gaccaaacia	agctcttttt	tataaaggaa	tggcatcata	tcttttacca	1020
ggacaaaaat	ctccatgggt	tttccaaaaa	cccaaagggt	taataacttt	ggacaaacia	1080
gtaatatcca	cgagttcaga	cgccgaatcc	agggaagaag	ttcccatgtg	ttcagatgct	1140
gaatccaggc	aagaagttcc	catgtgtaca	ggccctgaat	ccaggcgaga	agttcccgtg	1200
tatacatatt	ctgaaccacg	gcaagaagt	cccacgtgtt	cagaccctga	acccaggcaa	1260
gaagtcccca	cgtgtacagg	ccctgaatcc	aggcgagaag	ttcccatgtg	ttcagaccct	1320
gaaccaggcc	aagaagttcc	catgtgtaca	ggccctgaac	ccaggcaaga	agttcccatg	1380
tgtacaggcc	ctgaagccag	gcaagaagt	cccattgtgt	cagactctga	acccaggcaa	1440
gaagtcccca	tgtgtacaga	ctctgaacc	aggcaagaag	ttcccatgta	tacaggctct	1500
gaaccaggcc	aagaagttcc	catgtataca	ggccctgaat	ccaggcaaga	agttcccatg	1560
tatacaggcc	ctgaatccag	gcaagaagt	ttaatacgga	cagaccctga	atctaggcaa	1620
gaaattatgt	gtacaggcca	tgaatccaaa	cagggaagttc	ccatatgtac	agatccatata	1680
tccaagcaag	aagactccat	gtgtacacac	gctgaaatca	atcaaaaaatt	acctgtagca	1740
acagattttg	aatttaagct	agaagctctc	atgtgtacaa	accctgaaat	tacaacaaga	1800
gacccacaaa	atgtggggcc	tgaagtaaa	caacaagtaa	ccatgggttc	agacactgaa	1860

atcttaaagg	ttgctagaac	acatcacgtc	caagcagaaa	gtacacctgt	gtacaacatc	1920
atgagcagtg	gagagattga	atgcagcaac	accctagaag	atgagcttga	ccaggccctta	1980
cccagccagg	ccttcattta	ccgtcccat	cgacagcggg	tctactcact	cttactggag	2040
gactgtcaag	atgtcaccag	cacctgccta	gctgtcaagg	agtgggttgt	gtatcctggg	2100
aacccactga	ggcacccgga	cctcgtcagg	ccgtgcaga	tgaccattcc	agggggaacg	2160
cctagtttga	aaatattatg	gctgaaccaa	gagccagaaa	tacaggttcg	gcgcttggac	2220
acactcctag	cctgtttcaa	tctttcctcc	tcaagagaag	agctgcaggc	tgtcgaaagc	2280
ccattttcaag	ctttgtgctg	cctcttgatc	tacctctttg	tccagggtga	cacgctttgc	2340
ctggaggatt	tgcattgcgtt	tattgctcag	gccttgtgcc	tccaaggaaa	atccacctcg	2400
cagcttgtaa	atctacagcc	tgattacatc	aacccagag	ccgtgcagct	gggctccctt	2460
ctcgtccgcg	gcctcaccac	tctgggttta	gtcaacagcg	catgtggctt	cccttggaag	2520
acgagtgaatt	tcattgccctg	gaatgtattt	gacgggaagc	tttttcatca	gaagtacttg	2580
caatctgaaa	aggggttatgc	tgtggagggt	cttttagaac	aaaatagatc	tcggctcacc	2640
aaattccaca	acctgaaggc	agtcgtctgc	aaggcctgca	tgaaggagaa	cagacgcac	2700
actggccgag	cccactgggg	ctcacaccac	gcagggagg	ggggaagaca	gggctccagc	2760
taccacagga	cgggctctgg	gtatagccgt	tccagtcagg	gacagccgtg	gagagaccag	2820
ggaccagga	gcagacagta	tgagcatgac	cagtggagaa	ggtactagtc	aacctccaga	2880
aagagtatgg	agagaaaaag	aggcacacct	ggacgcagag	ccctgccagc	gccctcctct	2940
gctgttcgag	ctgcaaggag	accatgcctg	tgggagccag	gcctcgcttg	catgaagaag	3000
gaacgatgcc	tttttcaatg	gtgtctccct	cccattgtgc	agaagagctt	ttgttggtt	3060
ctctcccgag	cttgtgcctg	attctgtggc	ccaaaaaat	cattgttaac	atcttcatgt	3120
gtttcattct	gatctttcat	tcatatatat	gatgcctagc	taatttcatt	ttaaaataaa	3180
tgggaatctg	ttgtaaaaaa					3200

<210> 516

<211> 1756

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(1756)

<223> n = a,t,c or g

<400> 516

tgccctaacag	agggtgtctc	tgacttttct	tctgcaagct	ccatgttttc	acatcttccc	60
tttgactgtg	tcctgtctgt	gctgtgtcta	ctacttacaa	ggctcctcaga	agtggaaatac	120
agagcggagg	tcgggtcagaa	tgcttatctg	ccctgtctct	acacccagc	cgccccagg	180
aaactcgtgc	ccgtctgtctg	gggcaaaagga	gcctgtctctg	tggttgaatg	tggcaacgtg	240
gtgctcagga	ctgatgaaag	ggatgtgaat	tattggacat	ccagatactg	gctaaatggg	300
gatttcgca	aaggagatgt	gtccctgacc	atagagaatg	tgactctagc	agacagtggg	360
atctactgct	gcgggatcca	aatcccaggc	ataatgaatg	atgaaaaatt	taacctgaag	420
ttggtcatca	aaccagccaa	ggtcacccct	gcaccgactc	tgacagagaga	cttactgca	480
gcctttccaa	ggatgtcttac	caccagggga	catggcccag	cagagacaca	gacactggg	540
agcctccctg	atataaatct	aacacaaata	tccacattgg	ccaatgagtt	acgggactct	600
agattggcca	atgacttacg	ggactctgga	gcaaccatca	gaataggcat	ctacatcgga	660
gcagggatct	gtgctgggct	ggctctggct	cttatctctg	gcgctttaat	tttcaaatgg	720
tattctcata	gcaaagagaa	gatacagaat	ttaagcctca	tctctttggc	caacctccct	780
ccctcaggat	tggcaaatgc	agtagcagag	ggaattcgct	cagaagaaaa	catctatacc	840
attgaagaga	acgtatatga	agtggaggag	cccaatgagt	attattgcta	tgtcagcagc	900
aggcagcaac	cctcacaacc	tttgggttgt	cgctttgcaa	tgccatagat	ccaaccacct	960
tatttttgag	cttgggtgtt	tgtctttttc	agaaactatg	agctgtgtca	cctgactgg	1020
tttggagggt	ctgtccactg	ctatggagca	gagttttccc	atcttcagaa	gataatgact	1080
cacatgggaa	ttgaactggg	acctgcactg	aacttaaaaca	ggcatgtcat	tgctctgta	1140
tttaagccat	cagagttaac	caacccagag	actgttaatc	atggatgtta	gagctcaaac	1200
gggcttttat	atacactagg	aattcttgac	gtggggtctc	tggagctcca	ggaaattcgg	1260
gcacatcata	tgtccatgaa	acttcagata	aactagggaa	aactgggtgc	tgagggtgaa	1320
gcataacttt	tttggcacag	aaagtctaaa	ggggccactg	atcttcaaag	agatctgtga	1380
tccctttttg	ttttttgttt	ttgagatgga	gtcttgcctc	gttgccagg	ctggagtgc	1440
atggcacaat	ctcggctcac	tgcaagctcc	gcctcctggg	ttcaagcgat	tctcctgcct	1500
cagcctcctg	agtagctggg	attacaggca	tgcaccacca	tgcccagcta	atctgttgta	1560

tttttggtag	agacagggtt	tcaccatgtt	ggccaggctg	gtctcaaact	cctgacctca	1620
tgatttgcct	gcctcggcct	cccaaagcac	tgggattaca	ggcgtgagcc	atcatgccca	1680
gcccataata	cctcatttat	aatccactaa	atggatgtct	ctactctcgc	ctncnnnnat	1740
cgctgaccgg	ggaatt					1756

<210> 517

<211> 3195

<212> DNA

<213> Homo sapiens

<400> 517

tttctgtgaa	atcagtgtgg	ctgtccagct	gggctgagtc	gccaagaag	gacgtgacag	60
gtgccgacgc	caccgccgag	cccatgatcc	tggaaacagta	cgtgggtggg	tccaactata	120
agaagcagga	gaactcggag	ctgagcctcc	aggccgggga	ggtgggtggat	gtcatcgaga	180
agaacgagag	cggctgtgtg	ttcgtgagca	cttctgagga	gcagggtctg	gtccctgcca	240
cctacctgga	ggcccagaat	ggtactcggg	atgactccga	catcaacacc	tctaagactg	300
gagaagagga	gaagtatgtc	accgtgcagc	cttacaccag	ccaaagcaag	gacgagattg	360
gcttttagaa	gggctgcaca	gtggaggtga	tccggaagaa	tctggaaggc	tggtgtgata	420
tcagataacct	gggcaaagag	ggctgggcgc	cagcatccta	cctgaagaag	gccaaaggatg	480
acctgccaac	ccggaagaag	aacctggccg	gccagtgga	gatcattggg	aacatcatgg	540
agatcagcaa	cctgctgaac	aagaaggcgt	ctggggacaa	ggaaactcca	ccagccgaag	600
gcgaggggcca	tgaggccccc	attgccaaaga	aggagatcag	cctgcccatc	ctctgcaatg	660
cctccaatgg	cagtgcctgt	ggcgttctct	acaggactgt	ctccaggctg	gcccagggtt	720
ctccagctgt	ggccaggatt	gccctcagc	gggccagat	cagctccccg	aacctacgga	780
caagacctcc	accacgcaga	gaatccagcc	tggggttcca	actgccaaag	ccaccagagc	840
ccccttctgt	tgaggtggag	tactacacca	ttgccgaatt	ccagtctgtc	atttccgatg	900
gcatcagctt	tcgggggtgga	cagaaggcag	aggtcattga	taagaactca	ggtggctggt	960
ggtacgtgca	gatcgggtgag	aaggagggtc	gggccccgcg	atcatacatc	gataagcgca	1020
agaagcccaa	cctgagccgc	cgcacaagca	cgtgaccgcg	gccaaggtg	cccccgccag	1080
cacccccccag	caagcccaag	gaggccgagg	agggccctac	gggggcccagt	gagagccagg	1140
actccccgcg	gaagctcaag	tatgaggagc	ctgagtatga	catccctgca	ttcggctttg	1200
actcagagcc	tgagctgagc	gaggagcccg	tggaggacag	agcctcaggg	gagaggcgcc	1260
ctgccccagcc	ccaccggccc	tcgcccgcct	cttctctgca	gcgggcccgc	ttcaaggtgg	1320
gtgagctctc	agaggatgtg	gccctggaag	aggagaccat	ctatgagaat	gagggcttcc	1380
ggccatatgc	agaggacacc	ctgtcagcca	gaggctcctc	cggggacagc	gactccccag	1440
gcagctcctc	gctgtccctg	accaggaaaa	actcccccaa	atcaggctcc	cccaagtcat	1500
catcatcctc	aaagctcaag	gcagagaaga	atgccagggc	agaaatgggg	aagaaccact	1560
cctcagctcc	cttttctcca	tccatcacca	tcaacaccac	ttgctgtctc	tcctcttctc	1620
cctcctcctc	ttccttgtec	aaaaccagtg	gcgacctgaa	gccccgctct	gcttcggacg	1680
caggcatccg	cggcactccc	aaggtcaggg	caaagaagga	tgctgatgcg	aacgctgggc	1740
tgacctcctg	tccccggggc	aagccatcgg	tccggcccaa	gccattccta	aaccgagcag	1800
agtgcgacag	ccaagagaag	atggacatga	gcactttacg	gcgccagctg	agaccacacg	1860
gccagctccg	tggagggtcc	aagggtcca	agagtgagga	ttcggagctg	cccccgcaga	1920
cggcctccga	ggctcccagt	gagggttcta	ggagaagctc	atccgacctc	atcacccctc	1980
cagccaccac	tcccccatgt	cccaccaaga	aggaatggga	agggccagcc	acctcgtaca	2040
tgacatgcag	cgccctaccag	aaggtccagg	actcggagat	cagcttcccc	gcgggctgtg	2100
aggtgcaggt	gctggagaag	caggagagcg	ggtgtgtgta	tgtgaggttt	ggggagctgg	2160
agggctgggc	cccttcccac	tatttggtgc	tggatgagaa	cgagcaacct	gacccctctg	2220
gcaaagagct	ggacacagtg	cccgccaaag	gcaggcagaa	cgaaggcaag	tcagacagcc	2280
tggagaagat	cgagaggcgc	gtccaagcac	tgaacaccgt	caaccagagc	aagaaggcca	2340
cgccccccat	cccctccaaa	cctcccgggg	gctttggcaa	gacctcaggc	actccagcgg	2400
tgaagatgag	gaaccggagt	cggcagggtg	cggctcaggcc	ccagtctgtg	tttgtgtccc	2460
cgccacccaa	ggacaacaac	ctgtcctgcg	ccctgcggag	gaatgagtca	ctcacggcca	2520
ctgatggcct	cggaggcgct	cgacggaaact	cctcctttag	cactgtctgc	tcctgtgccc	2580
ccgaggccaa	gggcccgcct	gccgaacggg	ctgccagcca	gggttcagac	tcacccctac	2640
tgccccccca	cgcgaacagc	atccccgtgt	cccctgtgcg	ccccaaagcc	atcgagaagt	2700
ctcagttcat	ccacaataac	ctcaaagatg	tgtactgtct	tatcgagac	tacgaggggg	2760
atgaggagac	agcaggcttc	caggaggggg	tgtccatgga	ggttctggag	aggaacccta	2820
atggctggtg	gtactgccag	atcctggatg	gtgtgaagcc	cttcaaaggc	tggtgtgcct	2880
ccaactacct	tgagaaaaag	aactagcaga	gggcctgggc	tcttccagcc	tcagtgtgcc	2940
tctctggccg	cccactggat	gagcgtgtgag	acgaacaaaa	gggaaaggaa	aaaatggggg	3000

tggggggtgg	gggggtggaca	acattcaaca	ctgcagaatg	ggtgacctca	aagatgcccc	3060
ctgtccaagc	catcccacag	ctggaaggta	ggggatgggg	gtgcccacac	tgagtgagga	3120
agggaaatgga	ccaggggagta	ccaaacctgg	gacccagagc	caagtaagct	gtattgctggc	3180
cgctctggag	gattc					3195

<210> 518
 <211> 930
 <212> DNA
 <213> Homo sapiens

<400> 518						
aacaaattag	atatgatttg	ttttttaagt	tgaggcttag	ccagaagggt	ttgtatggac	60
ctcttaaatt	aagggttggt	tcacagtggg	gataatgttt	gctatgtcaa	taaacaggta	120
cttttctttc	atcattctcc	aaatttggtt	cttaatgaga	tctgacatcc	cctcttccat	180
tagaagggtat	tgaaatccag	tggaaccagt	tctccaagat	gtctcttgaa	agtaaaactc	240
tgcttaaaat	ctgttttttc	cagggtctta	atcactactc	tggttaattc	ctcaaacttg	300
taatgcccc	aggtctgatt	ttttccagat	aatggctcta	tcgttgccca	tacctgatt	360
ctgtcagtat	gtgtcattgg	caaaatagct	ttctctgcca	aagctttctg	acctttggct	420
ccatcttagc	tttggttagca	ggaaaggcct	gctaccaga	gtcagagtca	atcagagaat	480
tggttcatgtg	ggccttagaa	ctttactcct	taccttttta	tcttttcttt	aaactttcgc	540
ctctaaatct	gccagggaaa	ttgggactta	tagaaacctt	gtcaacttgt	tgggggcaaa	600
aattagatcc	tgtgttagaa	actctgcaaa	gagtgcagtc	catggcatca	ttgatcgcca	660
acttctttgt	tcctttcatc	cagaagaaa	gtcagctcat	tacgtaagaa	acttttcatc	720
aggaaaagca	gacaaccgat	aaaaaacaga	aactaagtat	tctgcaagga	aacctgggtt	780
aaggagaatg	tattgaaact	ggatatgcct	gttcctttgt	actcctccct	ttggcattgt	840
cctttttttt	tctgtaagat	aatcataaga	atttaggtta	tgaggaggact	acaaagatca	900
catggcttta	tggttccgc	tattatgctg				930

<210> 519
 <211> 869
 <212> DNA
 <213> Homo sapiens

<400> 519						
tttttttttt	ttgattgaca	atgagaatat	ttattgaggg	tttattgagt	gcaggggagaa	60
gggcttgatg	ccttgggggtg	ggaggagaga	cccctcccct	gggatcctgc	agctctagtc	120
tcccgtgggtg	gggggtgaggg	ttgagaacct	atgaacattc	tgtaggggcc	actgtcttct	180
ccacgggtgct	cccttcatgc	gtgacctggc	agctgtagct	tctgtgggac	ttccactgct	240
caggcgtcag	gctcaggtag	ctgctggccg	cgtacttggt	gttgctttgt	ttggagggtg	300
tggtggtctc	cactcccgcc	ttgacggggc	tgctatctgc	cttccaggcc	actgtcacgg	360
ctcccggtta	gaagtcactt	atgagacaca	ccagtgtggc	cttgttggct	tgaagctcct	420
cagaggaggg	cgggaacaga	gtgaccgagg	gggcagcctt	gggctgacct	aggacgggtca	480
gcttggtccc	tccgccgaac	atcacagcag	tgctgctgtc	ccacgcctga	cagtaataat	540
cagcctcatc	catagcctgg	gtcccgtgta	tggtcagagt	ggctgtgttc	ccagagttgg	600
agccagagaa	tcgctcaggg	atctctgagg	gccgcttgct	atcttgataa	atgaccaaca	660
caggggactg	gcctgccttc	tggtgatacc	aggcaacata	tttattgccc	aggttatctc	720
cagagcaggt	gatgctggct	gtctgtccctg	gggacacgga	cactgagggt	ggctgagtca	780
actcatagga	ggccacggat	cctgtgcagt	aagcaaggac	gccgaggaag	agagggatcc	840
atgccatggc	tgagcgacct	ccgatgctg				869

<210> 520
 <211> 2912
 <212> DNA
 <213> Homo sapiens

<400> 520					
tttcgtggtc	cgccaggctc	caggcaaggg	gctggagtgg	gtggctctca	tatcacctgc 60
tggcagccat	caacagtacg	cagactccgt	gaagggccga	ttcaccgttt	ccagagacga 120
ttcccagaac	atgctttttc	tgcaaatgga	cagactgaga	cctggagaca	cggctgtcta 180
ttactgtgcg	agagaaaagg	aatcttcctt	tgactgttgg	ggccagggat	ctctcgtcac 240
cgtctcctca	gcctccacca	agggcccatc	ggtcttcccc	ctggcgccct	gctccaggag 300
cacctccgag	agcacagcgg	ccctgggctg	cctgggtcaag	gactacttcc	ccgaaccggg 360
gacgggtgctg	tggaaactcag	gcgccttgac	cagcggcggtg	cacaccttcc	cggctgtcct 420
acagtccctca	ggactctact	ccctcagcag	cgtgggtgacc	gtgccctcca	gcagcttggg 480
cacgaagacc	tacacctgca	atgtagatca	caagcccagc	aacaccaagg	tggacaagag 540
agttgagtcc	aaatatggtc	ccccatgccc	atcatgccca	gcacctgagt	tcctgggggg 600
accatcagtc	ttcctgttcc	ccccaaaacc	caaggacact	ctcatgatct	cccggacccc 660
tgagggtcacg	tgcgtggtgg	tggacgtgag	ccaggaagac	cccaggttcc	agttcaactg 720
gtacgtcgat	ggcgtggagg	tgcataatgc	caagacaaag	ccgcgggagg	agcagttcaa 780
cagcacgtac	cgtgtggtca	gcgtcctcac	cgtcctgcac	caggactggc	tgaacggcaa 840
ggagtacaag	tgcaaggtct	ccaacaaagg	cctcccgtcc	tccatcgaga	aaaccatctc 900
caaagccaaa	gggcagcccc	gagagccaca	ggtgtacacc	ctgcccccat	cccaggagga 960
gatgaccaag	aaccagggtca	gcctgacctg	cctgggtcaaa	ggcttctacc	ccagcgacat 1020
cgccgtggag	tgggagagca	atgggcagcc	ggagaacaac	tacaagacca	cgcctcccgt 1080
gctggactcc	gacggctcct	tcttctctca	cagcaggcta	accgtggaca	agagcaggtg 1140
gcaggagggg	aatgtcttct	catgctccgt	gatgcatgag	gctctgcaca	accactacac 1200
acagaagagc	ctctccctgt	ctctgggtaa	atgagtgcc	gggcccggca	gcccccgctc 1260
cccggtctct	cggggtcgcg	cgaggatgct	tggcacgtac	cccggtgaca	tacttcccgg 1320
gcgcccagca	tggaaataaa	gcacccagcg	ctgcccctggg	aagtatgtag	acggggtacg 1380
tgccaagcat	cctcgtgcga	ccgcgagagc	ccggggagcg	ggggcttgcc	ggccgtcgca 1440
ctcatttacc	cggggacagg	gagaggctct	tctgctgtga	gtgggtgtgc	agagcctcat 1500
gcatcacgga	gcattgagaag	acgttcccct	gctgccacct	gctcttgctc	acggtgagct 1560
tgctatagag	gaagaaggag	ccgtcggagt	ccagcacggg	aggcgtggtc	ttgtagtgtg 1620
tctccggctg	cccattgctc	tccactcca	cggcgatgtc	gctgggtag	aagcctttga 1680
ccaggcaggt	caggctgacc	tgggtcttgg	tcactctctc	ccgggatggg	ggcagggtgt 1740
acacctgtgg	ttctcggggc	tgccctttgg	ctttggagat	ggttttctcg	atgggggctg 1800
ggagggcttt	gttggagacc	ttgcacttgt	actccttgcc	attcagccag	tcctggtgca 1860
ggacggtgag	gacgtgacc	acacggtacg	tgctgttgta	ctgctcctcc	cgcggctttg 1920
tccttgccatt	atgcacctcc	acgccgtcca	cgtaccagtt	gaacttgacc	tcagggtctt 1980
cgtgggtcac	gtccaccacc	acgcatgtga	cctcagggtt	ccgggagatc	atgagggtgt 2040
ccttgggttt	tggggggaag	aggaagactg	acgggtcccc	caggagtcca	ggtgctgggc 2100
acggtgggca	tgtgtgagtt	ttgtcacaag	atttgggtcc	aactttcttg	tccaccttgg 2160
tgttgtctgg	cttgtgattc	acgttgca	tgtaggtctg	ggtgcccagg	ctgctggagg 2220
gcacggtcac	caagctgctg	agggagttag	gtcctgagga	ctgtaggaca	gcggggaagg 2280
tgctgcacgc	gctggtcagg	gcgcctgagt	tccacgacac	cgtcaccggt	tcggggaagt 2340
agtccttgac	caggcagccc	agggcgcgtg	tgcccccaga	ggtgctcttg	gaggagggtg 2400
ccagggggaa	gaccgatggg	cccttgggtg	aggctgagga	gacggtgacc	gtgggtccctt 2460
tgccccagac	atccatgtag	tagtagtagt	agtcccaggg	gaccactact	gtccgctgtt 2520
ttcgcacagt	aatatacggc	cgtgtcctcg	gctctcaggc	tgctcaggta	catataggct 2580
gtgctcgtgg	attcgctcgc	ggtaatcgtg	actctgccct	ggaagtctctg	tgcgtagttt 2640
gttgcgccag	atacagggat	gatctctccc	atccactcaa	gccctcgtcc	agggggccagt 2700
cgcacccagt	tgatcgcaaa	gctcctgaaa	ctgcctccag	aagccttgca	ggagaccttc 2760
accgaggacc	caggcttctt	cacctcagcc	ccagattgca	ccagctgcac	ctgggactgg 2820
acacctgtag	ctgctgccac	cacaaagagg	aacctccagg	tccagtccat	ggtgatgagc 2880
tgtgctccca	ggacgaaatc	gtcgaaccgg	ga		2912

<210> 521

<211> 431

<212> DNA

<213> Homo sapiens

<400> 521

accaggaata	caaagatgag	tttgagcatc	atccttttcg	gaaatgtaaa	tacctaaagc 60
aaaggattct	agggcaactg	ttttcttctc	ccattatcaa	ctccataaag	agtcttttct 120
gacttctttt	tcaattgtcc	cctcctggcc	ttttaataac	atagatatgc	tgggtatctg 180
tttatgttct	atatgtgtac	ttagactttg	tttagaaaag	agtaagattt	ttccacctcc 240

aagaaccagt	gatcaactccc	ttgagggctc	tgtcacccct	gtggagaatg	cagcacggtc	300
aggcatgtaa	aaggggtctct	taccgggtcc	tctttcaggt	gggggactta	gattagtaga	360
taatccttcc	tggggccacgg	gcctcatgac	tggtcagtag	tggtgccaga	tttcacaaac	420
tgatatata	g					431

<210> 522
 <211> 971
 <212> DNA
 <213> Homo sapiens

<400> 522						
tttcgtgctg	acagggccgc	atcggtctac	cccaccttac	tttatctgta	cgcgccctaag	60
ctgctgcagc	tggcaccocg	ttgcgctcgg	cgaagagggc	tgggggcggg	agatgacggg	120
ggctctttcc	ctgcttggca	ccctgcgagc	accatctccc	ttttctcgc	cactccaagg	180
ttgcagacga	agcatagatc	tggttgaggt	tgagggtga	gagaaaatga	attctaattt	240
acctgcagag	aacttatcca	ttgcagtcaa	tatgaccaag	actttgccta	cagcagtaac	300
gcattgattt	aattccacta	atgaccaccc	ttcaatgtca	attacaaggc	ttttccagc	360
cttactggaa	tgctttgtca	ttgtcctttg	tggctacata	gcaggaaggg	ccaatgtcat	420
aacatcaaac	caggccaaag	gactaggaaa	ttttgtctcc	agatttgca	ttccagcttt	480
attattcaaa	aacatgggtg	tacttaattt	ttccaatgtg	gactgggcct	tcctatatag	540
tatcttaatt	gccaaagctt	ctgtattttt	cattgtatgt	gtattaacct	tattgggtgc	600
cagtcctgat	agtcgattta	gcaaagctgg	actattccct	atttttgcta	cacaaagtaa	660
tgacttttga	ttgggatacc	ctataggtaa	gttaattttt	atttttcaag	tgtttaaaaa	720
attcaatttt	aattttattt	ggcatttggt	agtaacagat	tcttactctc	atatctaaga	780
agtttttcat	ttttttctca	aatatgtctt	aggatgaatc	atagtttttc	ctaaacttca	840
gagtttgagg	atcctttaa	catctaccta	aaataaacgg	gcatattcta	ataacccctt	900
gtgaacaggc	ccaaattgga	atttttttct	tcccgggaag	cacatatgaa	aagaagctta	960
tatttttttag	a					971

<210> 523
 <211> 447
 <212> DNA
 <213> Homo sapiens

<400> 523						
ctgccttgca	gcctgtgtgg	gcccaggttc	ttgcttcac	ccagccatag	tgggagccac	60
cagcttgggg	gagcttctgt	tccatctgct	tggctcttag	catgtgggtg	ggacaagctt	120
tctgggcctg	gctaagtttt	atgaacagat	ggcacagcaa	attcctgatg	gttaggtcaa	180
gaggagaatg	tggtgcccag	cgccaacttc	tgtgtgtgtt	tgttttcaga	gactccctac	240
gggaggggat	gccccgcagg	aacatggtaa	gtagtggagc	gcatgggtgc	ctcttgagaa	300
cggctgtctt	ttatgtacc	taccctgtga	caagttagtc	gaaggaaacc	aagccatctg	360
catgtttatt	tcctctgctc	ataataggaa	aatggatgtt	atggagcttc	aagaattgag	420
ctaccaccgc	aaccctaattg	ggtaagc				447

<210> 524
 <211> 713
 <212> DNA
 <213> Homo sapiens

<400> 524						
ggcagcagcg	ggaaccacgc	acggttatga	gctcatgggt	tctgagggcc	gggcatggcc	60
tcatctgggt	cctcttcttc	aggattggtc	aggctgcagt	cggagtgtca	gctgggcctg	120
gggggtcacc	caaggccac	ctggggagag	tggcttccca	gcacctcat	ggggcagaga	180
gcagggcctg	cctccttgca	cgtaggcttg	ctaaggccct	gagctccatg	ctggctgttg	240
actgcaggcc	acgctcaggg	cctctccatc	gggcggctca	catcatggca	gcaagcctca	300

```
tcagcaagcc agtgagaggg tgcctatccg aggatgatat tccatcacct ctgtcagatt 360
ctgcttacta gtcagtcccc aggccaggc cactcgcaag gggaggacat tacaggaggc 420
gtgagtatag gtggtgtgat ctgtggggac cggcgcatag gctgcccacc acatgggggtt 480
aaaacctata aaacttcgaa gctgaattta attattttcg aacactagga aataaataag 540
gatcgctgtt tctggccttc ccagaacact ataggggtggg attggatact atattcccc 600
ttaattttgt aaaaggggaa agcatgccct ttcgatgcca acaattcacg gggccttaca 660
gggaaacctt ccaaccccc acgggagggc ttttacttcc catccggtgc gcg 713
```

<210> 525
<211> 703
<212> DNA
<213> Homo sapiens

```
<400> 525
ctctggcaga cgagcataag aatccacatt ttaaacaagc attccagggtg attctgatgc 60
aagggtgattt ggggtcttga agcctcacac ttacagaaac tgctctcttt tgcatttatg 120
aacctggctg ttgaaggctt cagatcacat gcttggggat ggtagatact agtggggatc 180
atctgactcc agactgggaa tcttctcggt acaggatgac cccaatcact taggtttact 240
tctggatcct gataattcct tgatagtcct cttttactga tgtctcttac ggccttaag 300
aaggcagaga aggggttaac tgaggccaca gaatagagag agtgaaggaa ctgaagggtc 360
atttttacaga gtgactgggg tgtggcccag tctccagta ggtgcccaga gccagtccaa 420
aattagaatg ggggtgggatt caaaactgct tttcctattc acttgccctt catgtgtaac 480
cacatgcagt gtgtcaacat gctttcaggc gccattaggc agcagcagtt ttgctccctc 540
tgggatccat gggaccttgg aatttctgt ggtgcgaggc gccacaaaaa actttttgcc 600
tatggggcct atgtacctct ttccaatcac cgctgggtcaa ccccttacct tctttgtaaa 660
aacacaaagc gcggggcgga attaaccgga gggaaacccc ccc 703
```

<210> 526
<211> 554
<212> DNA
<213> Homo sapiens

```
<400> 526
attcagcctc cagagcacca gcactggcac tggcactggc acacgctatg gcaaataaag 60
tgcaagacct gctctccctt cggaaagggg gacatcctcc tgcagtaaaa gctggaggaa 120
tgagaatttc caaaaaacaa gaaattggca ccttggaag acataccaaa aaaacaggat 180
tcgagaaaaa aagtgccatt gcaaattgtg ccaaaatata gacaccgat gccctgaatg 240
acgcactgga gaagctcaac tataaatttc cagcaacagt gcacatggca catcaaaaac 300
ccacacctgc tctggaaaaa gttgttccac tgaaaaggat ctacattatt cagcagcctc 360
gaaaatgtta agcctggatt taaaacacag ccgtctggcc agctgcctcg aatatctgac 420
agcttagcaa aaaggcccaa agctttccat aggcgtgctg cacttgcttg gtaaatataa 480
cagcttttgt atcttccctt ttgactttag gtaataaagc atccaaactt gtaaaaaaaa 540
aaaaaaagtc gacg 554
```

<210> 527
<211> 385
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(385)
<223> n = a,t,c or g

<400> 527

gttattttacc	tttagtgaat	tccatcttct	gaaaacaatg	cttttgtggg	tcttcttgca	60
actgaaactac	aagattcagg	caattccgac	ttatgaaacc	gtgatgacat	tttttaagag	120
ctttctctgag	aactgttgct	ttctggaccg	ggacatagga	cagagcttga	ggccgctctt	180
cctctgcttg	cgtctgcacg	gcataccaa	aggcaaggat	nctgaggtgc	tgcggcacct	240
taacttcttc	ccagagtcac	ggctcgacca	ggttacagtc	aaccattacc	acgcactgga	300
gaatgggggc	gacatggtcc	acctgaaaga	tcttaacacc	caggctgtga	gatttgggct	360
gctctttaac	caggagaata	caact				385

<210> 528

<211> 1375

<212> DNA

<213> Homo sapiens

<400> 528

atgttgtatt	gggtggttat	acatttcggc	gcaagggggc	ccggagggcg	ccgaaaacgg	60
cgaacgacaa	acggggagg	ccggaatcg	gcaagggcag	ccgggaaaga	gggaaacccg	120
cgaaagccca	cgggcaacgc	ccaaaccccc	atggacccaa	ggaaacgtaa	aaagggaagt	180
ctgaccccg	gaccaaatag	acgccaacag	gaaagcgagg	gcgcaaggag	acaatcgcg	240
cggggagaga	acgggagcga	agcagcccag	agcccagcc	ggggaacgga	acggaaggca	300
accaagagg	tgaaaagaaa	gcaagacgtc	accgggaatg	acccacatag	cccttctttg	360
tcttcgggag	gtccccatcca	ttaaagccaac	acttccggaa	gattaaaggt	gtcggacagg	420
gggacagctg	agaggagagg	aggatttctt	gccaggtgga	gagtcttcac	cgtctgttgg	480
gtgcaggcct	gtgtctgtcc	tggaaagatg	ctagcaatgg	gggcgctggc	aggattctgg	540
atcctctgcc	tctcactta	tggttacctg	tcctggggcc	aggccttaga	agaggaggaa	600
gaaggggctt	tactagctca	agctggagag	aaactagagc	ccagcacaac	ttccacctcc	660
cagcccatc	tcattttcat	cctagcggat	gatcagggat	ttagagatgt	gggttaccac	720
ggatctgaga	ttaaaacacc	tactcttgac	aagctcgctg	ccgaaggagt	taaactggag	780
aactactatg	tccagcctat	ttgcacacca	tccaggagtc	agtttattac	tggaaagtat	840
cagatacaca	ccggacttca	acattctatc	ataagaccta	cccaacccaa	ctgtttacct	900
ctggacaatg	ccaccctacc	tcagaaactg	aaggagggtg	gatattcaac	gcataatggc	960
ggaaaatggc	acttgggttt	ttacagaaaa	gaatgcatgc	ccaccagaag	aggatttgat	1020
accttttttg	gttccctttt	gggaagtggg	gattactata	cacactacaa	atgtgacagt	1080
cctgggatgt	gtggctatga	cttgtatgaa	aacgacaatg	ctgcctggga	ctatgacaat	1140
ggcatatact	ccacacagat	gtacactcag	agagtacagc	aaatcttagc	ttcccataac	1200
cccacaaagc	ctatattttt	atatattgcc	tatcaagctg	ttcattcacc	actgcaagct	1260
cctggcaggt	atttcgaaca	ctaccgatcc	attatcaaca	taaacaggag	gagatatgct	1320
gccatgcttt	cctgcttaga	tgaagcaatc	aacaacgtga	cattggctct	aaaag	1375

<210> 529

<211> 1787

<212> DNA

<213> Homo sapiens

<400> 529

tagggagaag	tgccaacata	tttgcagttt	attttcaaat	ggttcagagg	ctgtctgtgt	60
acatgagaag	acaaagataa	ggcaaagca	gcaaaattgt	aataattggg	gaatccagg	120
gaagggacta	tggtgtgtct	ttgtactttt	ttttccaact	tttctcgtag	gtttaaaatt	180
ttcaaaataa	aaaatgggaa	atactttaaa	aattgtaatc	aaagacatta	gtacagaaac	240
tttcataatg	tattttat	ttacagtaaa	attaatttat	gtaaattgat	agaattttac	300
taatttcact	cccaagttac	attaaaaggc	ttacatatgt	ttgataatag	catatgtaaa	360
ctagaactct	gaatgatatac	cattggtcac	aatacgtact	atgtagcggg	aatgggtgact	420
tttgtgattg	cacaagtcta	gagatgcccc	aaatgacatt	gacttagaca	tctgggtatt	480
ctaaggctga	aactgaagtt	gaatagaagg	ttttagtcaa	atactgagat	gaaaactgag	540
gcagtcctgg	cgggggggag	tgagtgtgtg	tgtatatata	cacacataga	catcatgctt	600
ctaaacattt	acagaaagaa	agggtagatt	atctacaaaa	aaataagaat	cagactgata	660
tgagatctta	caaacctaac	ccccttctct	ttcctaaact	ccagattctc	atatttctga	720
cttcctattt	gatattttaca	cttcgatatt	taccaggagt	cttcaacatt	ttgttcaaaa	780
cagtactctt	gggttttcttc	ctccaagact	actccttact	catatcagca	aatagcagct	840

cttttcaagt	gctcagtgta	aaaacctaca	attaatcctt	gattttctctt	tcagtcagcc	900
tataactaaat	caatttccatt	taaaatatct	cggctactac	tctgcacttc	caactgctacc	960
atcggcctct	ccagtcacat	tctccaagag	cactctatct	cattttaaag	acaaaatctc	1020
tgcagtggcc	tgtgatgctc	cttaatggcc	tacataatcc	agccctcaag	cacctccgtg	1080
atctctgtaa	aactttccct	tggctactgt	gcttcagcca	cattaaccag	cttgcataatt	1140
tctcacattc	accaagcttg	ttcctgcctt	ggggcctttg	tacttaccat	gttctgttct	1200
gagaatactc	tgccctcaaga	tatcctacaa	ctatcttact	gtattcagct	ctctgctcaa	1260
gtattaactg	atgaaacctg	tcacccctac	tccactccat	gttctgcttt	acttaacagc	1320
aattgcacat	atggccccct	gaataatata	catttagtca	cttattttta	cttatctgct	1380
aattaaaatg	tagacttttt	ctattctgtt	tactgctgta	ttcccagcat	gttttatccg	1440
aatgtgcagt	ggtttctttt	cttctccctt	atcgtgggaa	gtgatgtgca	caaatacaca	1500
taatggagcc	tgaatgtcat	attgctttca	tacctgtgtg	aattttggta	agaaaggaaa	1560
agtagcgatt	gacaggtaat	ataattacat	taagtcactc	tcatagttag	ctgtttattg	1620
ctttccctgct	cttattctca	gtccccagga	ccaaatgttg	accactacct	tccccacat	1680
ataattaggt	tatttaccga	acgccatgca	ggtggctgtt	aaaaggaaga	tatatactta	1740
caatataaac	acaacttttc	cctgttgtct	ttctgtctca	cacgaaa		1787

<210> 530
 <211> 611
 <212> DNA
 <213> Homo sapiens

<400> 530						
catttttttg	tgtgtgcagt	aatttcctta	taaagatagt	aattttctct	aaatcaaato	60
ttatcatgac	ttctaacatt	ctgtaaaata	atttgagagt	actagttaac	taattcacaa	120
acttttaatt	agtagtttat	tttcagttaa	gcacacaaga	aagaaatata	cagtctatct	180
ataatgaaat	cttagttgac	tagatgggtt	gtgggtgtct	aaaaattccc	ataactgac	240
acatggcctt	taaaatagga	agtctgagat	tttttggtt	tctcaacta	tatccttttt	300
aacaagttct	attttatgga	tctttatgta	gtgattttt	ggtagtata	catattctct	360
acttacataa	tcacatatat	aaaaggtaat	gtgggactgt	gttttcaa	cttatttcag	420
ctaagttttg	agagaagacc	aaaatcagta	aggtaagctg	agaactaaga	gtagaaagt	480
taaactagag	caggggccaa	gtttaggagc	agccacaact	ttctctgcac	atcaacttag	540
ttgtaacaat	ttagtttgaa	agaaaatctg	gaacataata	ctcagtttgt	aaaattgaag	600
ttggtagaat	t					611

<210> 531
 <211> 968
 <212> DNA
 <213> Homo sapiens

<400> 531						
ccccaaacac	ttagctgggt	ccccatgact	taagtgtgtt	ctcttggtgc	ctatggaatc	60
cagttctgaa	gaggtggggg	aggacaactg	tgggaaaagc	cctggggggc	cctcccaagg	120
ccccatcagt	gctctgagta	ggctgtcatc	agaacaaagg	gctccactgc	tgacaagggt	180
tgagaactgc	tggcttgagg	tgagaacccc	tttaacctct	gcgggacagc	atgtctttcc	240
ctatccacct	tcgattcttt	tctctttttt	ttcttcattg	gctccttctt	agtggattct	300
cttctctact	gccctggggt	tcagcctttg	tgcagtactc	tcgatgccct	gaacacacac	360
cttccctttg	cccaggcggt	gcaaacaaac	cacttcttca	agctccaaac	caaagtctgc	420
ctcctttagg	atgcctgtct	tgtgtctctc	ctgcctcccc	tagcccatac	ctctgctggc	480
accttctgta	ccatgccttc	agaaaccttc	ttatccccct	catctctggg	gccccctgtg	540
gatctggcat	acccaagttc	agtaaatgtc	tatcagtaag	ctgatggtac	atgcattttc	600
taaaatagag	ctgggacttc	ccatggggcc	cacatctgac	ctggcagccc	atgtattccg	660
gccattaggg	atgggaagcc	atgaggacct	ggccttctgc	ccgacccagg	cagccattca	720
aggtgagcaa	tggccacttc	caagactcaa	gtgcacctgg	accctgcccc	acaggccccc	780
ccaggaaaaa	caggctgtcc	ctggcggcag	taagtagcag	gcggcccaag	gtttctggag	840
ctcttggttt	tggcccaacc	ccccacccca	aaatactggg	ttaggacagg	ggactttag	900
ctccccctca	gtgacctttg	gcccgggggc	caagccccct	ggattgggat	tcgggggaacg	960
ctccagtc						968

<210> 532
 <211> 729
 <212> DNA
 <213> Homo sapiens

 <220>
 <221> misc_feature
 <222> (1)...(729)
 <223> n = a,t,c or g

```

<400> 532
agtgattatc ctaactgcta taggagttag tgatgagatc agcccataga gctcagaagg      60
ctattctttg aggaacccca ataccagaga ttttaataata gagacatgaa taggaaagag      120
atgactgcat taaaatgaaa aacttggtga tgggtccatct gtggggaata tgcacattat      180
atcttgagtt ttctgctgtg tctgccattt ccttcttgaa tcacattagt gttaagacct      240
atttcccaaa cagctcctca ttttacagag caaccccaat ggtccttgac ttcacacctc      300
actaacaaaa tcaaattcaa gcccaattacc tgaagggaac aaagctttac aggtataact      360
taacttacaa aattaccata attggccaag ggtggtggct tacatctgta atcccaatac      420
tttgggaggc tgaggcaggc agattaactt gagctcagga ctttcaagaa aagcctaggg      480
aagataatga gacctcgtct tctatacaaa taccaaaatt agcttggcat gggcgcttaa      540
acctgtcctt cttaaactact caagaggctg aggtgggaag aatacccttg gcccccgga      600
ggggcagggg ttcttggggg aaattgccct ttggccttcc accccggggg caaaaaaaag      660
ggaaaccctg tcttcccnc anaagaanac accccacaaa acagcggggg gtattttttt      720
ttttgggcc                                     729
  
```

<210> 533
 <211> 774
 <212> DNA
 <213> Homo sapiens

```

<400> 533
tctttagtat atataatatt aaaaatggct atatatggaa ttctatctga gaattattat      60
atgggttaat tcaaatcctg gctctcttcc tttgtcttag tagatgggtc cttcttttat      120
tataactaga gttttaagtt ctcttttatt agggcatttg aataaaaaac aatcattgta      180
gaagtataat taattaataa ctagtctatct tatgtcatct tgagggaatc atgctgggat      240
ggcaaactcg gagactgagg ccacaactcc tctccttcca tacacaggac agatgtcact      300
ggtctatcac atctcaatgc tctaagccag agtcccaaga atccttctta agcaccatcc      360
atctattaga gggagcacag gaggggacac ccactgaatg actattcaaa caatttctta      420
aagaatatgc aatgcataat aagtggttga gatacagaat gctactttac taaaatacta      480
cagtgtgaag atgtatagaa aaaagcacat gctttggaga cttaaaggcc tgggtatgaa      540
tcattggctct gacattaaca aacctcacct cctctttaa agagtaataa tgattggtat      600
ctcattgagc ttcgtaaact aaaaaactac agagtaagaa gggggggccc ttacaaaagc      660
tttggagggg gacaaacctg gcgaggaatc atggctctgt ctttatctcc catcaccgcc      720
tctctaaaag agtaaaaatg agtgtttggc atggaacttt gtcttaagaa agaa          774
  
```

<210> 534
 <211> 770
 <212> DNA
 <213> Homo sapiens

 <220>
 <221> misc_feature
 <222> (1)...(770)
 <223> n = a,t,c or g

```

<400> 534
aaaagaaggt aataaattaa aaagatcatt tacagagata gcctgggggtg ataagagttt    60
aaagttttga tctttttggt catcttaaaa aaattatgat atatgtattc tctctagctc    120
acagtcttct cattttcaaa atgagagaaa cagggatact attatgtttc ttatcagcat    180
taaattatat aacccttgtg acatcccaaa aattgattct atccaaaaaa atgcatgtta    240
atcattatatt gccaaaaaag acaatctcca aatttcttta ttttgtaaaa gtattccatg    300
acctagtccct atagagcagg tgaatattgg agattgtttt ctctgtaact ttactatcat    360
ctacctatct tcgtattttg gtgagagatc atgaaaccct ctatcaaact ctctttatgc    420
agtaagttaa aacaaattag cactggctta taaagatata tcaaattaga gtaaaatgca    480
actgaaaata tcataaatca ttcggtaatt aatgttttct taaattcttg gggnaagtac    540
aagagaagaa attggagatg tgcagacttt aaatgaccta aacagtctta cacaggagtt    600
tttgtagtat ggtaagaagg aggtggctac ttatgttttc aaaaagcaca tgacctcatg    660
aaaagtatgc aaggctatgc tgtcgacggt agaaaaacga gagacagaga ataatttaaa    720
gaaccttccc atgttaggcg tgaaaatgaa aaggcttaaa tttaggtgcc    770

```

```

<210> 535
<211> 459
<212> DNA
<213> Homo sapiens

```

```

<400> 535
tgattcaact gattccttga aataaaggta gtcagacctc gcggtatgat ggagatgaag    60
caactgattt actgggtttc tctatttttc tgctgttcgt gttgtcattt aaacagacat    120
ggaaaccgtc tgcacacgac agagatcttt ccgagccttt ttcacttagt gtgctgtgct    180
gaccgcctcc cctggatgcc tgcacactca tttggttctc ccttttggtc acttttttcc    240
acttaccctg gcagaaattc acgtggctgt cagttagtaat tcagtgaact gctttcaaaa    300
aatgttataa attaaagcagc tttctgtgtg atagcttttg ggttgaactg agaagggtc    360
agtgaaggga gaagctatgt tgagctcaga gtcagaatgc cctgccccag acattttgag    420
atgtgaattt ttcatttgtt ttgtttgtcg acgcggccg    459

```

```

<210> 536
<211> 484
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> (1)...(484)
<223> n = a,t,c or g

```

```

<400> 536
aggagtgcc aggggncca aactgaaatc ccctacntnt ctacgcacan ncnggnacga    60
gggagnaggt acgagaatac agaatacggn tgttttctat taagcacaca cattacagag    120
atttgcaaaa atgttacaat gctgctcttc tcaactaaact ttttcttttg gaaaatagtc    180
atgtttcata aaaatgtaat atttatatta acatgtaatg ggtttattat tgttactttt    240
aatggattg ataaatttat tttaaatatt tctattttta tttctaacac agtaaattgt    300
aatagccata atccacataa acaaaagttc tttggggatc tcagtaattt ttaacagtgt    360
aaaggggtcc tgagaccaa aagtttgaga actgctgcaa tcaactataa agagtaagtt    420
tgccctgaac tgcattaact ggtatacttt ttctctgtct ttgatcaata agggcttaaa    480
tatg    484

```

```

<210> 537
<211> 727
<212> DNA
<213> Homo sapiens

```

<400> 537
 gtttaaaatc atcaatgaca tcaaacaaca gaaaaacttc ttacaaaaac aagaagagcc 60
 agtggtgtct gagcatccgc attacgtcct tcccttctgc ctgtgggtac tgaatcagtt 120
 acctgtatga gaccgtttgt gaagctccaa gttgcttggg tgtttaaag gtttcccgca 180
 taattcacac gcgtattgtc tctgggactg aagtgtctgg gactgttctt ccagggcagc 240
 cgggtcttca ggctctcccg tctcactaat gcaattaaaa ttctcacaac tgacgacttc 300
 ttcactttct ttttcttcag cactttggct gctagcttct tctagggtat ttttactagc 360
 agattccaac ctctttgtca aaccatcatc tgacttgggt tcagatactt gctctgcgga 420
 tttctgtgac ttcaggaaat tgagcttctt cagatgaatg gcctttttga gcctcatctg 480
 cttgacaggt tgttggcatg tggcgtctga ctgaggtgt ggggcagagt cattcacagg 540
 tgtaaaagtt tctgagtttg taatagtaat ttgctgtttt gaaaggcagt tctgtgcagc 600
 tgccatctga agtatcagga gcttgttttg agatttcacc tgcggagtga tgacgattaa 660
 ctgatggtga agcatgcgga tgcgattcat ccaacgtttt gttctgctgt gcatctgctg 720
 aacattc 727

<210> 538
 <211> 3197
 <212> DNA
 <213> Homo sapiens

<400> 538
 agatgccgga ccgctccttc ccagctcctc cccgtgctcg ctaacacagc acggccgcct 60
 gcagctcctt ctctgggaga tcgcgggggc ctaagatgtg tccctggggca ctgtgggtgg 120
 ccttgccctt gctgtccctg ctggctggct ccctacaggg gaagccactg cagagctggg 180
 gacgagggtc tgcctgggga aacgcccaca gccactggg ggtgcctgga ggtgggctgc 240
 ctgagcacac cttcaacctg aagatgtttc tggagaacgt gaaggtggat ttcctgcgca 300
 gccttaacct gactggggtc ccttcgcagg acaaaaccag ggtggagccg ccgcagtaca 360
 tgattgacct gtacaacagg tacacgtccg ataagtcgac tacgccagcg tccaacattg 420
 tgcggagctt cagcatggaa gatgccatct ccataactgc cacagaggac tcccccttc 480
 agaagcacat cttgtctctc aacatctcca ttcctaggca tgagcagatc accagagctg 540
 agctccgact ctatgtctcc tgtcaaaatc acgtggacc cctctcatgac ctgaaaggaa 600
 gcgtgggtcat ttatgatgtt ctggatggaa cagatgcctg ggatagtgt acagagacca 660
 agaccttctt ggtgtcccag gacattcagg atgaggctg ggagacctg gaagtgtcca 720
 gcgccgtgaa gcgctgggtc cggctccgact ccaccaagag caaaaataag ctggaagtga 780
 ctgtggagag ccacaggaag ggctcgcaga cgctggacat cagtgtcccc ccaggttcca 840
 gaaacctgcc cttctttgtt gtcttctcca atgaccacag cagtgggacc aaggagacca 900
 ggctggagct gagggagatg atcagccatg aacaagagag cgtgctcaag aagctgtcca 960
 aggacggctc cacagaggca ggtgagagca gtcacagga ggacacggat ggccacgtgg 1020
 ctgcggggtc gacttttagc aggcggaaaa ggagcgcgg ggctggcagc cactgtcaaa 1080
 agacctccct gcgggtaaac ttcgaggaca tcggctggga cagctggatc attgcacca 1140
 aggagtatga agcctacgag tgtaaggcg gctgcttctt ccccttggct gacgatgtga 1200
 cgccgacgaa acacgctatc gtgcagacct tggctcatct caagttcccc acaaagggtg 1260
 gcaaggcctg ctgtgtgccc accaaactga gccccatctc cgtcctctac aaggatgaca 1320
 tgggggtgcc caccctcaag taccattacg agggcatgag cgtggcagag tgtgggtgca 1380
 ggtagtatct gctgcgggg ctggggaggc aggccaaagg ggtccacat gagaggtcct 1440
 gcatgccctt gggcacaaca aggactgatt caatctgcat gccagcctg aggaggaaag 1500
 ggagcctgct ctccctcccc acacccacc caaagcatac accgctgagc tcaactgcca 1560
 ggaaggcta aggaatggg gatttgagca caacaggaaa gcctgggagg gttgttggga 1620
 tgcaaggagg tgatgaaaag gagacaggg gaaaaataat ccatagtcag cagaaaacaa 1680
 cagcagtgag ccagaggagc acaggcgggc aggtcactgc agagactgat ggaagttaga 1740
 gaggtggagg aggccagctc gctccaaaac ccttggggag tagagggaag gagcaggccg 1800
 cgtgtcacac ccatcattgt atgttatttc ccacaaccca gttggagggg catggcttcc 1860
 aatttagaga cataaaacac aggcagatca agtagcattg atcaatggca tgattccaac 1920
 tcagatttgt gggacaccaa agcccaggat ctcccaagt gcctgctgc agtttagcag 1980
 gtctcttcca gctaagagc agtgagacat tgggagccca ggagtgttga ggccaggcca 2040
 ggtcaggcc catcagtcac aggtgtgact gggctgcttg tcacacacag ggcgtggtct 2100
 ggccactgtt gccagtgtc actcagcggc caaatgcttt ttaatatgac ccctgaggca 2160
 ctgaaaaata accccaggcc aactgcagga tagagagaga ggtcaggaca gcagccctgt 2220
 gggctgcatg atacactgtg gctggagtta ttgtgacccc ctggtgcagt gctcccacgg 2280

ccagtgggtgc	acacaggggcc	attcactgtc	catagactga	aaccatgtga	ccatttgaga	2340
gggccggggca	cactttccccc	tgagggatgg	ggcagcctgt	ggccagcacc	tctgcagtta	2400
ctctgcatag	ccagctcacc	agcatgccat	gcccaggggtg	ccccccagtg	acaacctcat	2460
gggagacggg	cctggatttg	aatttggttg	aattaaatgt	gctctggcct	tggtctttga	2520
aacatatcta	tttttattcc	ttggtgacat	gtccttaagt	gacaagactc	cagccttcct	2580
gggcgaggcc	tctccagcct	cggagagct	gcagtcctta	tcggcgatca	ctggctctgc	2640
ctgcatttgc	cggctctctt	gagtcacgtg	catcccagca	ccccgcctgg	gctcggactg	2700
tgggaccaga	ctcagcctcc	ccgaacacaa	gggaagataa	ggcttccatt	tgctctgtgt	2760
ttcaccctct	cctctgtctc	tccaggccac	acatggaacg	gggcggtatg	aggaagagtc	2820
tgaagtggt	gaagagtgc	cctatggccc	tctgacctcc	agccagagca	gggcctaggg	2880
gaggcttaga	gagggcaggg	cctctccccg	tggttgaagc	tcccatttat	ttaagaaaa	2940
gtgggggggtg	gggaaaacgt	tatgttaa	gtttacatgg	aaccaatgaa	caactttaac	3000
acacaaatac	aacgaaacat	tcttgtttta	ttactggcgt	tatagaaaat	atgaattcct	3060
gtacatgcc	gggcagtgt	gtgttacaat	gctattccaa	gttgggtgtt	gagcatcttc	3120
tttcagtctt	ggtggtgtgc	ttctgtgcct	gcttgaaaat	ttcactagga	aataaagtca	3180
aatgtctaaa	aaaaaaa					3197

<210> 539

<211> 444

<212> DNA

<213> Homo sapiens

<400> 539

gacttcggca	cgagaatagc	tgagtttaca	aagatgcatt	aaatagaaat	agaacgcaaa	60
ggaaatccca	gccattacca	tgaacaaaat	ggtaagttac	ttctactaga	actttactga	120
ctttaagcta	gagagaaaga	gaaagagaga	ggtaaaacaa	aaatcaaaaa	ggaaaaggct	180
cagatcatgt	tcggcatgat	caagaggagg	gtcagaagag	ctgtttttgt	gggccgcacc	240
gtgctctgtg	gatcttgtta	ctctgggatt	attatgcacc	gtggcaagac	tccaccctcg	300
aagatggtct	gccgatttga	agaatcattt	tcttgcttat	ttttaactc	ttaaagacag	360
ggaaaaagac	tgaaggagcc	taaatgctgt	ggtttctctc	aaccattatt	gttgtaaate	420
ctatgggtcc	tgaagtaact	cact				444

<210> 540

<211> 459

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(459)

<223> n = a,t,c or g

<400> 540

ataacagggc	aagtccacagc	catgggattc	cttttccttc	tggattctgc	cctcatgcag	60
acttgggtta	cagtaataga	tgtaagtctg	catcatgtag	agatcaaagc	cccaagaata	120
aggctcatgt	ggtccctacc	cttgaggaga	caaaaatata	cgatgtagat	ggacagctgc	180
attatgcaca	cagatccatt	tcaatataac	atggtgggct	actctgggaa	cactcctgct	240
ccacaaggag	cagtataaaa	aaataaatta	atcaaatttt	aaaaaagcaa	catggtagat	300
cctgggcgct	tagagagtac	tgctcaagtg	ctatgagaac	acttgggcag	agatatctac	360
ccagacatgg	gagtgcagtg	gttgagaaat	ctgatccctac	actgctaaca	cctctgtctg	420
gagaagttct	cgtgccgaag	tcttcagagc	ggttctatn			459

<210> 541

<211> 1266

<212> DNA

<213> Homo sapiens

<400> 541
 caccagatgt attgtgtcct accatgaatt cactccatgc tagccacatt ggctgtatg 60
 gctattcctt ggacacacct aggatgttct tgctcttag cttgcctacc tttctctcat 120
 catttgggcc tcagcgagga tatcatctcc tcagagaagc cttctgtgac catgctatct 180
 aaaatactcc agcacttcag tcaccttta tcccattact ctgctttttc agaaacattg 240
 gtgctccctg aaacgtatth gtthacttgc ttagcgtctt ttctcccgca ctaccatgta 300
 agcttcttga ggggttaggga ccttggttagg gataaccact gtatccttag agtgtgacac 360
 atagtaggtt ctcaatacat atttttgaaa ctctaccctg atgcaaaaaga gatatacaat 420
 aattatagtt tttgcattat aaatgtcttt ggtgaaatcc ctggcacaaa actaataata 480
 aagaaataaa cagataatgg tgagttctgg gcctgcaaac ctaactcttt aaagcagtca 540
 cagtaaatgt gtcattggat ccatagaact tgggaagtca gcatatttta ttgggaaaag 600
 catgaacttc aaagtaaaac ttatggtcaa atctcattac tgggtgcttc ttaagtcatt 660
 taacctttga gccacaaggt acacaaatgt gaatttagag gaataatagt gactccataa 720
 gacctcaag aaaaggaaat aaggtattgt agcccgatga tccttatcac atggctaaca 780
 aattaggggg tctaaaattc tgggtatggc ataccggaa acacgtcacg catgtagggg 840
 cctactaaga aaagaggttc cttgagtcgg gaccagggac gttatgcaa atggcgggaa 900
 ctggaggccg cggggatggg ccacgtcgag cattcgccgg catcggggat tgggggaacc 960
 cgggcgggtc gtgcgcgggg ggcgggaacg gggggcgctg gagcgaagag ggagcatcgg 1020
 cggctacggc gcgcaaccgg gcgagcagca ccggcagtg cgcaatatac gcggagcagc 1080
 tcccatgtaa cggcgaggtt tgtgcgcac ccgcggaagt agggcgaaga ccacgtcggg 1140
 gcgcgggaaa ctgcgcgcga ctgcgcggcg acaacggcac gggcacccgc ggactagggg 1200
 gccacgcgcg ggtgcacctg ctggctcgtc ggcgagaacg cgggcgggata attcgcggac 1260
 cgagcc 1266

<210> 542
 <211> 647
 <212> DNA
 <213> Homo sapiens

<400> 542
 ccacgcacac gtttctgttc gatatacaga tgcttcttga ctacgatag agttacatct 60
 cagtaaacct gtaatgaatt aaagatgcat acacctcatc taccaaatat catagtgtat 120
 tttatcctac tctacatatg ctcaataac ttatatttac ttacaattag gcataatcat 180
 ctaacacaaa gcctatttta taataaatta ttgagtgtct tgtaatttat tgaatgctgt 240
 acgttgtgac aaaattgcaa tggtttgcca ccatcataaa tttggaaaat catttagtgg 300
 aacctctata agttgggaac tgtttgtata cctataagtg gaattattcg gtcataagat 360
 atcgctatct tcaacttgag tagatttgca aatgggtttc caaagtggct ataccaggtt 420
 atatcaattt acattctaac cagcagtggt taagagttct ggtgctccac atctcaaaca 480
 tatatatata tgtgtataga gggagagaga gagggagagc gagagccaca gagagcgcac 540
 gttttcatat gttcctgcta actctttctt gcagaatgac tgatcatttt ttctaattga 600
 tatggaagat ttctttgtat atctcaaata caaaaacctt tatgagt 647

<210> 543
 <211> 447
 <212> DNA
 <213> Homo sapiens

<400> 543
 ctagagagcg tggggaattc caggattgcc cacttgggac cctgactatg aagggtcaag 60
 atagcccatc ctgccccagc actcagagcc ctattaccaaa ggccctact ccaagaatcc 120
 accatcaaaa ccggggccct gccagtgcct tccagtggt caggcctagg gaagaatagc 180
 cccattatgc ctgttactcc tgatccttct gcagtctctc tctttgtgac cccatggcct 240
 ttgctgctat gtctgccctg gccccacaga gtgccaggtc agagccaccc tggcctacat 300
 agcagggccc cggttcacag gctaaaacct gggcctcctg ccaggctgca actcccagct 360
 gcacaccgca acctgagaca tctcagcata ttctaggaac tagtaatggg gacgcttccg 420
 actcgtctggg gaaggagat gagggcc 447

<210> 544
 <211> 446
 <212> DNA
 <213> Homo sapiens

<400> 544
 aaaacatcat gtcattggtat acttgtcagt gtctcttctt tctcagcaac acattaagga 60
 atggtgctac ttcttgccat tggatttgta gccctgatga catgcagatg gttgatttca 120
 gctcaacata cgaaggatt ttcaggccat ttgtgttcaa gataaaagg cctgacagct 180
 ttaggataga catgagcccc atccctgaag acatttaatc acaatctaga caagctcttg 240
 ttgtaaatga gctcaagtat cagatttgga agtgaatgat cttttacatt tttgtcaagc 300
 ttgaggttcg tgaacttgga tccaacctct tattttttgc agataagaaa acaaggatca 360
 caccagttga gagattttctc cgaagtcaga catctcatta gagctagaga ggccagacta 420
 gcatgtctcc catgatccag tctgaa 446

<210> 545
 <211> 711
 <212> DNA
 <213> Homo sapiens

<400> 545
 cggacgcgtg ggcgggcaag atggcagcgg cgctgcgctg gcgttggtga gtgttcggga 60
 cgcgggcctg caggcgccat ggtcttctc accgcgcagc tctggctgcg gaatcgctc 120
 accgaccgtt actttcggat ccaggagggtg ctgaagcacg ccaggcactt ccggggaagg 180
 aaaaatcgct gctacagggtt ggcggtcaga accgtgattc gagcctttgt gaaatgcacc 240
 aaagcccgat acctgaagaa aaagaacatg aggacctctt ggattaatcg aattacagct 300
 gctagccagg aacatggact gaagtatcca gcgctcattg ggaatttagt taagtgccag 360
 gtggagctca acaggaaaagt cctagcggat ctggccatct acgagccaaa gactttcaaa 420
 tctttggctg ccttggccag taggaggcga cacgaaggat ttgctgctgc cttgggggat 480
 ggggaaggaa ctgaaggcat tttttccaga gtggtgcagt accactgagg actgttgctg 540
 tattgattag gaaaagagac agagtaattt gcagtttgtt tgattttatac ttttgtttat 600
 ctacaacca ataacagaca tgagggatgg ccctgtctct ctgggacaga gcctcaaaga 660
 tgatgtccat gttttgtgtg aatgaaactc aaacactctt caaaaaaaaa a 711

<210> 546
 <211> 1076
 <212> DNA
 <213> Homo sapiens

<400> 546
 tattactgcg agatgacgac agaacggggc gccggaagtg gaagaccagg cagcccagct 60
 gaaggcagta agctcggctc acagtgcag gagagtctct gggtagacgg gcaaaggggc 120
 ttgagaaggc ccggaggcga agccgaagag aagcaactgt gccccggaga agagaagctc 180
 gccattcca gactgggaac cagctttcag tgaagatggc agggccagaa ctgttgctcg 240
 actccaacat ccgcctctg gtggtcctac ccactgttat catcactttc ttcgtaggca 300
 tgatccgcca ctactgttc atctgtctgc agagcgacaa gaagctcacc caggaacaag 360
 tatctgacag tcaagtccta attcgaagca gagtcctcag ggaaaatgga aaatacattc 420
 ccaaacagtc tttcttgaca cgaaaatatt atttcaacaa ccagaggat ggatttttca 480
 aaaaaactaa acggaaggta gtgccacctt ctccctatgac tgatcctact atgttgacag 540
 acatgatgaa agggaatgta acaaatgtcc tccctatgat tcttattggg ggatggatca 600
 acatgacatt ctgagcttt gtcacaacca aggtccctatt tccactgacc ctccgtttta 660
 agcctatgtt acagcaagga atcgagctac tcacattaga tgcacctctg gtgagttctg 720
 catccctggg tacttcccca atggattttg ggcttcggag catttactcc tctgattctg 780
 ggccaagata atgcgctga ccaatcacga atgatgcagg agcagatgac gggagcagcc 840

gatggccatg	cccgcagaca	caaacaaagc	tttcaaggta	tactccttca	cctttcaaag	900
ctgcagcaat	gctctgaaag	gtgttaccaa	gagctatttt	aaaaatagct	tccttgaagg	960
gagtgttggtg	tggttccatc	ggttttaatt	taaacttagt	aaaaacatta	gtttacacgt	1020
ctctcttttc	tgagacagaa	tcattctatta	agtaaatgga	aattcttggg	gctttt	1076

<210> 547
 <211> 749
 <212> DNA
 <213> Homo sapiens

<400> 547						
taaaaatggt	gaaaaataagg	cttactttta	ttatttgaat	atggtaatta	tgtaattatc	60
ccttttaatat	gttaagggtta	tattctgtgc	cttagagtat	gctaagcact	ttatacataa	120
ttatcttatt	taagcctcgt	agaaatctta	tgagcaaaat	gttactcggg	acacttaaaag	180
tacaggtaac	tgaggcttag	agatgtaaaa	taatttgtcc	accacagtgc	ttttaaaaga	240
tgctcgtaac	cactatattg	taatttcaaa	ccctgattcc	attaatgctt	tttgttgtgt	300
tgcctttact	gataattgtg	ttcaatatcc	ccatgaggga	ggcagtcttt	gactttttat	360
ttatgataaa	gattattaaa	gtgcttaaa	ttttttattg	tatagcgtgt	tttatcatca	420
aacaggcttt	agttttttta	ggtaaaactga	ccataaataa	taaaagggtga	tggtgttatg	480
acacttgggt	ttgagagaac	tttaattgga	gcaatatttc	aagaaaatcc	ttcttactgt	540
ttttcgaaac	tggtgagggg	cagagatgcc	ccaagaacac	ttctagggtt	attggttcga	600
aagaaaggac	taccgggagt	ggtttttaggc	gccctcggg	caagaattaa	taagggaag	660
aattcccgga	agatttctaa	gggtttgggc	cggggaccgg	ctgggggaac	gagaccccc	720
ccggcccttg	tggttgcaac	ctgccccct				749

<210> 548
 <211> 783
 <212> DNA
 <213> Homo sapiens

<400> 548						
tccctgcggg	ggaattcgca	cacacacacg	tagtacaaag	aaatactatc	agtgaatgga	60
ggcaagtcac	tgagtctgtg	aatcttgata	gtccagagaa	agggatgaat	ctgccagatc	120
agaggagctc	ctgatgtctt	cttcatcagg	ttaaggatat	tttcttttat	atctaattta	180
attcatctaa	gaacgactca	ttaaattacg	tataattctt	tactacataa	atgaagttcc	240
ctcttattcc	tattttactt	tttttttaaa	ttagggaatgg	ttacttattt	tatcaaatgc	300
tttcattatg	agggtttctt	tcttcttttg	tttgcgtgtg	tcagggaatga	tgtagacagg	360
ccagtctccc	tgctactctt	ctcttcctat	agtttattct	caacatatcc	agacacatgt	420
cccttgttca	aactccccac	ccacttactg	tgttggttag	aggaaatata	aatgtcctta	480
ttataactga	caaggcccta	cctgttcaa	tcttactact	tttctgccta	atctacttct	540
ctctctctat	ctaactcatc	ctactcagtc	atcttggtct	tcttgatgtt	cctggaatat	600
actggacatg	ttccctttac	agagcctttt	cagttgctcg	tctccttacc	tggtgatgtat	660
ttccatccca	catcaccaca	cttaggttaga	tccctcacag	acttcagatc	tttactcaaa	720
ggtcaccttt	tttatgagtc	cttccctggg	cacccttttc	taaagggtcat	cccatcttgc	780
ctt						783

<210> 549
 <211> 429
 <212> DNA
 <213> Homo sapiens

<400> 549						
gggtgaacatt	ttctgagctt	ctttctagct	cttacatgct	gtggttctgc	gaattctttg	60
cctttctcaa	gatttccagaa	aattaactct	cattgagtgg	cattttctga	ctccgggaat	120
aaagcatttt	ttttctaaga	ttgttttctt	aaaattagaa	gactgatgtt	gtattattaa	180

aaacaaccaa	ctcaccatgc	ttcagggtag	agattctttt	gtctattgct	aatggaggat	240
gtagagaga	aggatcatggc	tgtacctatt	atgctgttct	atttcagcct	actctataaa	300
tctctggctt	tttttgaatc	ctattctttt	gctgagtacc	acccacctac	ttctgggaga	360
caaggctgtg	tgaaagacat	cctcaaacgt	ctcatctggt	ttctcatcca	tctgcacctg	420
gatgctggg						429

<210> 550
 <211> 882
 <212> DNA
 <213> Homo sapiens

<400> 550						
ggaattcttt	tggaatag	taattatagt	cacatgggtt	aaaattcaaa	agttacaagg	60
ggatataaat	gtctccctcc	caccttgctc	ccagagggtg	ctgtttcgat	cagagccttg	120
tttctagacg	tgtgtgtgtg	tatgtgtacg	catgtgtgtg	tatgcacaag	tagttttggg	180
ttctcttttc	ttggtggtgt	acagaagggt	agtcaaagcc	cgactcatga	tccctaactc	240
gagtccttta	atgggattgt	gtcctaactg	caaaaccgcg	ctcaccaact	ttgttataaa	300
ctcccgggtt	ttataggac	agtcactctac	tgtcccttcc	taacagcatg	gtgcagaaac	360
actccataaa	tgagtcttgt	gttgaatcag	attgaattaa	gtgagaaagg	aatggcgggtg	420
aaaaatgtgg	ctttagtcat	cacatgggccc	tacgggtttg	tgaaagtaac	attgagtcctc	480
cttgtgttct	gtgtgtactg	catgtatgtc	atcttgcctc	taaggatgta	tattacccat	540
aaaggagcat	gcagacacat	gagtgcactc	tggttgcca	ctaactgcct	gtggccttgg	600
ggctgtcact	caacttttca	tctggaaatt	gagaataata	atactattat	ccttctggaa	660
ttgtgtgcat	aaatgcacag	ggcctggctc	ataaaaagta	ctcagtgagg	gccaggcgcg	720
gtggcgacg	cctgtaatcc	cagcactttg	ggaggccgag	gggtgcagat	tacgaggtca	780
agagatcgag	accatcctgg	ctaacacggt	gaaacctgt	ctctactaaa	aatacaaaaa	840
caaaattagc	cgggcatggt	tgcggtgtgc	ctgtagtccc	ag		882

<210> 551
 <211> 976
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)... (976)
 <223> n = a,t,c or g

<400> 551						
ctttttacat	agatgatttc	attaagtagt	aaagagggtg	aatcagagtc	ttggtattta	60
atcagtcaga	tacttgga	ggaataanaa	agcttgccct	cagtgatcct	tggattagga	120
gtgacaaggt	ggactggagc	tccctctgaa	ggacagtga	caacactgat	ctcttgctct	180
ctgtcccaaa	acaggatgtg	tggcagggtc	ctgcggcgcc	tgttgccgga	ggagagccgg	240
cgctccaccc	ccgtggggcg	cctcttgctt	ccgtgctcc	tgggattccg	ccttggtgctg	300
ctggctgcca	gtgggcctgg	agtctatggt	gatgagcaga	gtgaattcgt	gtgtcacacc	360
cagcagcccg	gctgcaaggc	tgcttgcttc	gatgccttcc	acccctctc	cccgtgctg	420
ttctgggtct	tccagggtcat	cttggtggct	gtacccagcg	ccctctatat	gggtttcact	480
ctgtatcacg	tgatctggca	ctgggaatta	tcaggaaagg	ggaaggagga	ggagaccctg	540
atccagggac	gggagggcaa	cacagatgtc	ccaggggctg	gaagcctcag	gctgctctg	600
gcttatgtgg	ctcagctggg	ggctcggtct	gtcctggagg	gggcagccct	ggggttgca	660
taccacctgt	atgggttcca	gatgccagc	tcctttgcat	gtcgccgaga	accttgccct	720
ggtagtataa	cctgcaatct	gtcccgcccc	tctgagaaga	ccattttcct	aaagaccatg	780
tttgagtgca	gcggtttctg	tctcttgctt	acttttttgg	agcttggtgt	tctgggtttg	840
gggagatggt	ggaggacctg	gaagcacaaa	tcttctctct	ctaaataact	cctaacttca	900
gagagcacca	gaagacacaa	gaaagcaacc	gatagcctcc	cagtgggtgga	aaccaaagag	960
caatttcaag	aagcag					976

<210> 552
 <211> 1644
 <212> DNA
 <213> Homo sapiens

<400> 552
 aatcgcgggc aaagatggcg gcggccaggt gttggaggcc tttgctacgc ggtccgagggc 60
 tttcattgca caccgcggct aatgccggcg ccacggctac agaaaacgacc tgccaagacg 120
 tcgcggcgac ccccgctcgcg cgggtacccgc cgattgtggc ctccatgaca gccgacagca 180
 aagctgcacg gctgcggcgg atcgagcgct ggcaggcgac ggtgcacgct gcggagtcgg 240
 tagacgagaa gctgcgaatc ctaccaaga tgcagtttat gaagtacatg gtttaccgcg 300
 agaccttcgc gctgaatgcc gaccgctggt accagtactt caccaagacc gtgttcctgt 360
 cgggtctgcc gccgccccca gcggagcccg agcccgagcc cgaaccgaa cctgaacctg 420
 cgctggacct cgccgcgctg cgtgcggctg cctgcgactg cctgctgcag gagcacttct 480
 acctgcggcg caggcgggcg gtgcaccgtt acgaggagag cgaggtcata tctttgccct 540
 tcctggatca gctgggtgca accctcgtgg gcctcctcag cccacacaac ccggccctgg 600
 ccgctgccgc cctcgattat agatgcccg ttcattttta ctgggtgcgt ggtgaagaaa 660
 ttattcctcg tggctatcga agaggtcgaa ttgatgactt gcgataccag atagatgata 720
 aaccaaaca ccagattcga atatccaagc aactcgcaga gtttgtgcca ttggattatt 780
 ctgttcttat agaaatcccc actataaaat gtaaacccaga caaacttcca ttattcaaac 840
 ggcagtatga aaaccacata tttgttggct caaaaactgc agatccttgc tgttacggtc 900
 acaccagtt tcatctgtta cctgacaaat taagaaggga aaggcttttg agacaaaact 960
 gtgctgatca gatagaagtt gtttttagag ctaatgctat tgcaagcctt tttgcttggg 1020
 ctggagcaca agctatgtat caaggattct ggagtgaagc agatgttact cgaccttttg 1080
 tctcccaggc tgtgatcaca gatggaaaat acttttctt tttctgctac cagctaaata 1140
 ctttggcact gactacacaa gctgatcaaa ataaccctcg taaaaatata tgttggggta 1200
 cacaaagtaa gcctctttat gaaacaattg aggataatga tgtgaaaggt ttaaatgatg 1260
 atgtttact tcagatagtt cactttctac tgaatagacc aaaagaagaa aaatcacagc 1320
 tgttgaaaaa ctgaaaaagc atatttgatt gagaactgtg ggaatattta aattttactg 1380
 aaggaacaat aatgatgaga tttgtaactg tcaactatta aatacattga tttttgagac 1440
 aaatatttct tatgtcaacc tgttattaga tctcttactc tgctcaaatt catcactgaa 1500
 agatttaatt ttgattacct tttgttgatt taaaaataat tgcatttgta tattgctaac 1560
 tgataagaca aattgagtta ttgagctatt aaatgcacat tttaataata atgcagaaat 1620
 cccaaataaa atgctaacat actg 1644

<210> 553
 <211> 1094
 <212> DNA
 <213> Homo sapiens

<400> 553
 atcataatca ccataataaa tacattatat atatatgcat cactccaaaa agttttcaca 60
 tgcccttttg taatacctcc ctcttctcct cccctcaaca atcacgctac tggtttgtgt 120
 cttttttag aatttaaata catgaaattg ttcattgcagt gtgatacttt ttttaaactc 180
 taaatctttt ctcagaataa ttcttttgag actcattcgt gtagtggaat gtaccaaatg 240
 tattattttt ttattgtaga gtggaattta ttgtatgcat atatcataat gtgttttcat 300
 atttatctgt tgatgaaaag tgcacttggt ttaattttt gctatcacia gtaaaacttc 360
 tgaacacatt tgtgtatgag tctgtatgta ggcacatact ttcattttat ttggtactaa 420
 caccaaggag tagaataatt ggatcttatg taggtttat atttaacttt ttagaaaact 480
 gccacattat tttccaaagt tgttgttttt tttcacattc tcaacaccaa tgcatagaaga 540
 agttcagtta ctctacatcc tcattaatag ttggtatggc cacataattta aatttttgct 600
 ctttttatag atcagggata atatctcatc agtttttaaa tgcatgtcac ttataattaa 660
 taatgttaag aatattttca tgggcttatt tgccatccat atatcttctt ggttattgctg 720
 tgcctgtttt ctattatttg aaaactttga gagtgtatta tatatttcaa ataccatcc 780
 atttatata atgggattac acagattttt ctcccagccc agcgtttgga tttactttt 840
 cttaacggcg cctttaaata ccaaaagcta ttatcattga tgcacttcac ctccccacc 900
 ctaactttag tctctacttc cttggccgac ctactcaacg catcagtttc aatcgactat 960
 tcgctccgtg acacaaacgt cgctctttta ctgtacgtgg ccagtcctct cagctcaata 1020
 tagtgtccta agtacctact ctagtttcac tgttctatg cggccgccac tatactctgt 1080

accaccgcgt aact

1094

<210> 554
 <211> 625
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)...(625)
 <223> n = a,t,c or g

<400> 554
 atttttaaagt gtttcttttt agtaaaagat tgatcctcaa actgggtttt acaaagttag 60
 caggtaagag gtagtgactg tcaaatgttc aaagtgtgtg tttgttttgg tttggtttgg 120
 ttttgctttc aaagggcaca caaaccaatc cgatttgaaa aacacaactt tacaataaat 180
 gaaggaaacc tgttctctat gaatatccca attgtaacga ttaggtctca ccacaggaca 240
 agttgctacc acaaattaat cacatgtgaa cagcaaaactg tctttacgaa cataaagagg 300
 cattctaagt tgtagcagac gcctgctcta cgagacatta atggagtaaa atcctggagt 360
 attacagata aacagttaaa gtgatgaaca agggctttat ggtttgata aacagaaata 420
 taaacaattt tgtatttttc tcaattatat gtaattaaat aacgtttcag gctaacaaag 480
 tattgggtcc ctttttttac cagcttatgc taaagagggt ttgaactaag ggaatttgtt 540
 tctagcccca atgaaaaagc ccccccccc cccctccaa attatggaaa gaaaaaaatt 600
 ggnccgagac cttaaaccac ccccc 625

<210> 555
 <211> 376
 <212> DNA
 <213> Homo sapiens

<400> 555
 atttctaaa actttattcc tctaaacatc ttttcaattc cccagatctt gttttagtgt 60
 tagaggccca aagtagagct ctctaaacaa aggccttcctc agtgctgtaa aatgaatttg 120
 tatctctttg ctgttctctt cttttatgta tttctacata taaaaatcat ctttatttgg 180
 tttgctacta aatggcataa tttattttcg aaattcagtt atttttgtat tttgcatgtt 240
 aaggctctaa gccttaactt agggctctgg taaatatgaa ctccaagact cctcgaaaaa 300
 agtgtagaaa taatagcaaa attaaagatg tttgtattcc ctgtgaattt attttttctt 360
 tcattcaaca cagaag 376

<210> 556
 <211> 842
 <212> DNA
 <213> Homo sapiens

<400> 556
 cccacgcgtc cgctgagctg aaaagttgga tgtgccaaag tgtaaaaaca ctgatagtgt 60
 tccttgctgc agataactgc agcaaacatc gtctttagct tcattatgaa gattgcttct 120
 ttcttgctgc agaataacgg tatgtattct ctctcactgc agctcccagt gctctgtgtc 180
 ttaaaatcat ttaaaagccta tagcttgctt tggggagtta gtacaggggt taagggaaggc 240
 tttgccgga gaacaattgt aaatcatgag agttactact tgcgcattgt gtggtagtct 300
 ctttaatgca taatggctct ttttaatacc aaaaattaat taataaagga aatgattaca 360
 ttgtccaaat aactgttaaa catgacagat ctgttttatg atactgtgtt tgacagttaa 420
 acattaaagta aacatttaat tgactttaag cttgaaatgt tcagaatgct ctaacccttg 480
 ctacagaatc tttctgcag caagttaagt attttgtgtg ttttttccca cctgtagctt 540
 atcaggcccg gtccaaagcc ttctagcaga ggggattgat cctgtcagggt gttgctgcca 600

agacatcgga	aggatttttg	accaagggtt	tcaaaagctc	agtgtcacat	ctgccatttg	660
ataaaggaaa	gattttggat	gcagaacctg	gcatttactg	gcctttgggg	cgctgggatg	720
tcggttagcc	ctcggcactc	cacaaaggag	ccctgccaca	cttatttgta	ctgggggggg	780
gggctaata	ttccccgacc	atgcaatcga	ataaatagtc	cctacagggg	ctctccagcc	840
cc						842

<210> 557
 <211> 677
 <212> DNA
 <213> Homo sapiens

<400> 557						
ctcatatttg	tgtaaaaatt	ttatatcact	gtaggctaaa	cttacctctg	cacactcctc	60
catgtccact	gagcatctgc	tgaagtctgc	tttttcttca	ttttttatgg	aatggaaagc	120
tcattccatgt	gtacattatt	catgcattta	cttttctgcc	acctccaaag	cattcaatta	180
aagcaggaat	taaggctcaa	ctatcttact	ttaacacagt	tttggcagag	atgttacagt	240
gagatgattt	ttttctgtct	gtcaaagggtg	tttcttcatg	ttttccaaga	tggtctagaa	300
catcatttag	agtaaaat	cattttggag	gaaattttta	tgaaaagtct	ctgtagggtat	360
ctcctgtgaa	tagagggttt	aaaaagaaaa	agaaggggaa	aaaagcccaa	agggaaaaaa	420
taagtttctt	actctgactt	tcacacatac	tgtgttctat	ttgtctccct	catatgtccc	480
agagctaact	cctcttcact	gagaacgagg	gcttaatttg	aatgggttta	atgcctttta	540
accttttaaa	atttttatgg	acaatttaac	tggcattttt	actcccaccc	accagtataa	600
aacttcatgt	tggttaagaaa	cccaacaaaa	atccttggaa	ccctgcaaaa	atgttttacg	660
ttacaatttg	acccttc					677

<210> 558
 <211> 1828
 <212> DNA
 <213> Homo sapiens

<400> 558						
gaaaaaaaat	ctgaaaccct	ctcagttcta	cttcaggaaac	cgcccggaat	ccgggtcgac	60
ccacgcgtcc	ggtacccaact	gccggcctcc	gcgctttctg	gccgcagtgt	tcgagtcaca	120
tggaagctcc	tgaggagccc	gcgccagtgc	gcggaggccc	ggaggccacc	cttgagggtcc	180
gtgggtcgcg	ctgcttgccg	ctgtccgcct	ccgagaaga	gctgcgggcg	ctcttggtcc	240
tggtcgccc	cgcgttcttg	gttcagctga	tggtgttctt	gatcagcttc	ataagctccg	300
tggtctgtgg	ccacctgggc	aagctggagc	tggtatgcagt	cacgctggca	atcgcggtta	360
tcaatgtcac	tggtgtctca	gtgggattcg	gcttatcttc	tgctgtgac	acctcatct	420
cccagacgta	cgggagccag	aacctgaagc	acgtgggcgt	gatcctgcag	cggagtgccg	480
tcgtcctgct	cctctgctgc	ttcccctgct	ggcgctttt	tctcaacacc	cagcacatcc	540
tgctgctctt	caggcaggac	ccagatgtgt	ccaggcttac	ccagacctat	gtcacgatct	600
tcattccagc	tcttctctga	acctttcttt	atatgttaca	agttaaatat	ttgctcaacc	660
agggaaattgt	actgccccag	atcgtaactg	gagttgcagc	caaccttgct	aatgcctcgt	720
ccaactatct	gtttctccat	caactgcac	ttggggtgat	aggctctgca	ctggcaaaact	780
tgatttccca	gtacaccctg	gctctactcc	tctttctcta	catcctcggg	aaaaaaactgc	840
atcaagctac	atggggaggc	tggtccctcg	agtgcctgca	ggactgggccc	tccttctctcc	900
gcctggccat	ccccagcatg	ctcatgctgt	gcattggagt	gtgggcctat	gaggtcggga	960
gcttctctag	tggtcatctc	ggcatgggtg	agctgggcgc	tcagtccatc	gtgtatgaac	1020
tggtccatcat	tgtgtacatg	gtccctgcag	gcttcagtgt	ggctgccagt	gtccgggtag	1080
gaaacgctct	gggtgctgga	gacatggagc	aggcacggaa	gtcctctacc	gtttccctgc	1140
tgattacagt	gctctttgct	gtagccttca	gtgtcctgct	gttaagctgt	aaggatcacg	1200
tggtgtacat	ttttactacc	gaccgagaca	tcattaatct	ggtggctcag	gtggttccaa	1260
tttatgctgt	ttcccacctc	tttgaagctc	ttgcttgac	gagtgggtgt	gttctgaggg	1320
ggagtggaaa	tcagaagggt	ggagccattg	tgaataccat	tggttactat	gtggctggcc	1380
tcgccatcgg	gatcgcgctg	atgtttgcaa	ccacacttgg	agtgatgggt	ctgtggtcag	1440
ggatcatcat	ctgtacagtc	tttcaagctg	tgtgttttct	aggctttatt	attcagctaa	1500
attggaaaaa	agcctgtcag	cagggtgccc	tgaaaacctt	gaaggaaatt	taacgaacga	1560
tgttggaaa	acaggcagac	ctcagtcaga	tcagcagatg	cgccaagaag	aacctttgcc	1620

ggaacatcca	caggacggcg	ctaaattgtc	caggaaacag	ctggtgctgc	ggcgagggt	1680
tctgctcctg	ggggctcttc	taatcttgc	ggtggggatt	ttagtgagat	tctatgtcag	1740
aattcagtga	cgtggttaga	aagaaagtca	ggtcaagtga	tgcttttgag	cttacacaca	1800
attcgcaggc	cgaattacgc	cactcttt				1828

<210> 559
 <211> 392
 <212> DNA
 <213> Homo sapiens

<400> 559						
cgaccacgc	gtccgcacac	atgaggttcg	tgacacacac	acgaggcagt	cggggagcag	60
aatcaccaaa	tgccaaggtc	acacaccagg	ttcccacgac	tgtctactac	tcagttatct	120
ttaacagctg	ttaaataatct	cagactcacc	ccagcctgaa	gctagggttc	tgacaataac	180
atgcatttaa	ctctaagttt	acttctgttc	tccctacact	tcccacgta	tattattcga	240
gttaattttt	gtcttgtttc	caatttatct	caaaggatgc	gaagtacaaa	actgcttcgg	300
ctcattgact	tagatttttc	atttactttc	tctctcttgg	atctaccacc	agtaaataaa	360
tatgacatgt	atatcagaaa	ctttggaaaa	aa			392

<210> 560
 <211> 3505
 <212> DNA
 <213> Homo sapiens

<400> 560						
gcatcgctcg	cagacgcgc	caccgcatg	ggctcctgag	gctagcttgt	cactttctgc	60
aaaggtttcc	ctcagggagc	ctcctgctgc	caggcaccat	gacagtgagg	ggggatgtgc	120
tgcccccgga	tccagcgtcg	cccacgaccg	cagcagcctc	gcccagcgtc	tccgtgatcc	180
ccgagggcag	cccactgccc	atggagcagc	ctgtgttcc	gatgacaact	gccgctcagg	240
ccatctctgg	cttctctgtg	tggaaggccc	tgctcatcac	atgccaccag	atctacatgc	300
acctgcgctg	ctacagctgc	ccaacgagc	agcgtacat	cgtgcgcac	ctcttcatcg	360
tgcccatcta	cgcttttgac	tcttggtcca	gcctcctctt	cttcaccaac	gaccagtact	420
acgtgtactt	cggcaccgct	cgcgactgct	atgaggcctt	ggtcatctat	aatttcctga	480
gcctgtgcta	tgagtaccta	ggaggagaaa	gttccatcat	gtcggagatc	agaggaaaa	540
ccattgagtc	cagctgtatg	tatggcacct	gctgcctctg	gggaaagact	tattccatcg	600
gatttctgag	gttctgcaaa	caggccaccc	tgcatgtctg	tgtggtgaag	ccactcatgg	660
cggtcagcac	tgtgtgcttc	caggccttcg	gcaagtaccg	ggatggggac	tttgacgtca	720
ccagtggcta	cctctacgtg	accatcatct	acaacatctc	cgtcagcctg	gccctctacg	780
ccctcttctt	cttctacttc	gccaccgggg	agctgctcag	cccctacagc	cccgtcctca	840
agttcttcat	ggtcaagtcc	gtcatctttc	tttctctctg	gcaaggcatg	ctcctggcca	900
tcctggagaa	gtgtggggcc	atccccaaaa	tccactcggc	ccgctgtctg	gtgggcgagg	960
gcacccgtgg	tgccggctac	caggacttca	tcactctgtg	ggagatgttc	tttgacagcc	1020
tgccctctgc	gcacgccttc	acctacaagg	tctatgctga	caagaggctg	gacgcacaag	1080
gccgctgtgc	ccccatgaag	agcatctcca	gcagcctcaa	ggagaccatg	aaccgcacg	1140
acatcgtgca	ggacgccatc	cacaacttct	cacctgccta	ccagcagtac	acgcagcagt	1200
ccaccctgga	gcctggggcc	acctggcggt	gtggcgcccc	cgccctctcc	cgctccaca	1260
gcctcagtgg	gcgccgcgac	aacgagaaga	ctctcctgct	cagctctgat	gatgaattct	1320
aggtgcgggc	tgcagtgggc	gaagtgtctg	cgccatagcc	acggtcaggc	tgtgccccac	1380
ctccagcctc	accaccaggc	caggaggcag	ctggcacagt	gctcacgcgc	cctttattta	1440
ttggaccaga	aacactcaca	tgctacttcc	agaggaaagg	gggacagcca	ggctcgcccc	1500
tgggccttca	ggaatattta	tacatggccc	agcctgcact	gcccggggcg	gggcagagga	1560
cactgggagc	aaggcttatg	cccctgctgc	cgtcctgtg	ctggggggcat	gctggggacca	1620
ggcgaccaca	ggccccaatg	cttgtgtgtg	gaccagcggc	tgacgccttc	tagccctctc	1680
tccccgcgag	actctcaggc	tgaggtcggc	aagccgtggc	tccccacac	accgtgcaat	1740
accctgtctg	acctgggctc	ttcccgctgc	catccctccc	ctgtccacct	ttgtccagtg	1800
ctagattcac	ctcaccggcg	gcaggagtgg	ggatgtgggc	gctctgtgtg	cctccctctc	1860
tgacccaggc	ctctgtggca	tgctgcaagg	atcagagcca	gacaccagga	gtcacaggcc	1920
ccaccacagga	agggcattca	ggggccctgg	gcaccgcttc	tgttgaagca	ggggcttctg	1980

ggccccctggg	tatccccacc	tgctgtggcc	acacctctgc	ctgcctcatg	cccttcccc	2040
ctggcctacc	aaggacagcc	cacagccgc	actgccggct	cacttgggtc	cttcctcgat	2100
agctttgggc	agagcccttg	cttcctggct	gcttcagggc	tcagggggtc	ccagccctcc	2160
ttcccaggct	gatgctgggt	cctctctctc	tttggggctt	ctccctcccg	tttcagggga	2220
aaggctctgag	tctccacggt	tcagaccagc	ttctggggga	aggcagtcctg	gcagggagac	2280
cgggaggggt	ggccacacag	tggggagctg	ggaggtgggg	ggaatgggtcc	cagactcctc	2340
tcggggcccc	tatccacaca	gggcctgggtg	ttctacccca	tctggccctt	ggcccatctc	2400
ttctgtgcct	tagtcacata	tgaaagcgcc	cctccctggc	tcccatctg	tcccacacgc	2460
tccttggggc	tcttagttca	gctgctggca	ctgcaggat	cctgcagtgc	tgggcccaga	2520
gcccttggac	aggcctcagg	agtggtcagg	accaccaagc	ccctcctctc	ccctccaca	2580
cctctagacc	tggggcctcc	ggaaccccca	gcaggctggg	cttatactag	ctcctgactt	2640
aggaagagcc	tcgtgtcaca	acacgtgtcc	ctacaggcaa	agtgtcctgg	catttataaac	2700
ccagattatc	cctgggtttg	ggctgcagtc	acctggagaa	gctggtaggg	taaggagag	2760
ggaccctgcc	gggtgtcact	ggggattctt	tcttttggtc	cttcctggaa	tgaacagggt	2820
ccctccctgc	cacctgtgag	gagagtggg	gcccagccgt	cttcctggcc	tccttctctt	2880
cctcgtggca	gaggcctgca	tgtgggtgcc	agaggccagc	tctccccctc	catcttgggg	2940
gggcggagca	gttggggcca	agctgcccgg	gaggggtggg	gcagacacag	gctgaggacc	3000
agccctggcc	ctgccccgcc	atctgctttc	accaagctgt	ctctccaccg	tggcttccct	3060
tctccctcca	ggccaaagtgc	ctgctgattc	ccactccctt	ggttttccgc	tgccccagct	3120
tgctgtttgc	gtggaggggtg	gggggagctc	agtggcaggg	aatcagcggg	ccgtgggggc	3180
gtggggacgg	gaacatgtgc	ccgaccgctc	catccccctc	tccctcttag	gatgcataac	3240
ctaccctgtc	tttttttttt	ttaaattttct	ttccagggtta	gagtagctct	ttgtacataa	3300
agaatacttg	aaaaattaat	tgtatgatgt	atgagcgaag	acagagggtc	cctagttttg	3360
tatcttgttg	tatgactgcc	atgagtcca	ccagaaagcc	actctatttt	ggtctctgtg	3420
acatttttaa	tgcgtgacag	aagtgcagaa	ataaacgtga	ggaagaaatc	tatatatgag	3480
ataatataga	ttgtattgaa	atctc				3505

<210> 561
 <211> 396
 <212> DNA
 <213> Homo sapiens

<400> 561						
acacattcca	cccttgagat	tgctgtaaca	gtgatctcaa	cctctgataa	ggtaagttta	60
taaactta	gaggaaaaa	tggggaaaaa	ggtcactctt	ctgctgcaga	agtgcgcttg	120
gcttctcttg	gtttgctgcc	tattcactgg	cattaagtac	ctgaacaaat	gttttatcac	180
agacagggaa	ctggttaggg	atgttcacaa	tgcattgaac	atccttaggc	ataattttta	240
tgtgaactgg	gcattcctta	atacattctg	actccatgat	cagattacca	gaaagtgcag	300
gtccactca	ctatcttgat	tcagcatctc	ccatctggcc	aaagttgaat	tttacattga	360
gttgatgggt	gataaatatg	cttagcaaaa	gtatat			396

<210> 562
 <211> 612
 <212> DNA
 <213> Homo sapiens

<400> 562						
caactatctt	atttcttat	catgcacaag	ttaaattgta	gactgaggag	taggtgagtt	60
atccccaagg	aagtaaaatg	atgttaattt	tcttgaggtc	acatgaattg	tgagtagctg	120
aatgctactg	tgaattcttg	gcagcccgac	cacagagcct	gaactcttaa	atattatact	180
gtattaaact	gacatgttta	taaaagtaac	aattacatgc	tacctgaatg	ccctcagtag	240
ttttgaacat	ggtgcaactg	tttatcccta	tactaaaatt	ccaattaggc	tattctgttt	300
tgagtctttt	taactatggt	ttagaatttt	tgtttccttc	ctcattgtca	ggcatctttt	360
cttctccctt	tccctctctt	cttcccttcc	ctcttctctt	tccctctctt	cccccttctc	420
tttttccctt	tcttagagtc	ttgctctgoc	accacactg	gagtgtagcc	tcaaaactcct	480
gggctgtagc	catcctccta	cctcagcctc	ctgagtagct	gggactgcaa	gtgtatacca	540
ctatgcctgg	ctaattttaa	aaaattttaa	attttttttt	ttttggagaa	acaaaagcct	600
tactatgttg	gc					612

<210> 563
 <211> 791
 <212> DNA
 <213> Homo sapiens

<400> 563
 acatccaaca tttgaatgta ttttgactag gtaatTTTTt tctcctttgt taataaaaaat 60
 agattttaatt ttttaaatgt catttttctt gcatctcatc aaatatactt tcatacacta 120
 taaaaatgat gttgggtcat atgtatcaca tgtctgtaat tcagaaatgc aaacctttgg 180
 aactgactc aacatctgga gatatttttt ctggttctta tggctggtgt tctcctacag 240
 ctctctacga gcagtcttgt gaagcccaca agcaccgagg gaacccatcc gggctttact 300
 atattgatgc agatggaagt ggccccctgg gaccatttct tgtgtactgc aatatgacag 360
 gtatgttgat aatcgttaga tgcatagata agaatagacc aaggagaaat ttacctagtt 420
 ggcagcatta ttaaaacatg cagtttgata gtgtgtactt gctaagtaga agcattaaat 480
 atgtatttat taattttggt gtcaacaaaa ttttcttgta tttcttcttt gcctgggttg 540
 gattataggc aagattcaat gctctgccaa ggcattctct tagctcctac actcctcata 600
 atacatctgt tcatgtgcat catgataaaa taaaaacctc tgattcgggtg atttacatgc 660
 tttctgtatt tagaaaaaac agaggtgttt aaaaatgcta agaaataaca tagatatgtt 720
 aatgttctat gtgcatttta aataatttag tgatttttat gtcataataa tttttcataa 780
 ccaaagaaac t 791

<210> 564
 <211> 414
 <212> DNA
 <213> Homo sapiens

<400> 564
 caggggtaag ccaccgcacc cagccccgta aatatttctt gaggatctac tgcgtgccag 60
 gccttggtgt gggttccagg agctgattca gagagtgcag agatgaaaaa aggagtgggg 120
 tgtacgtgtg tatccgtgtg tccatgcatg tgtgtgcatc cgtatgtgtg cacatgtgca 180
 tgcattcatg tgtgtgtgtg tctgtgtgct tgggtgctct ctgagcctgg tggcctggga 240
 ggcttctcag aagaggtcac atctctgcca agaccaaggg cactgtaagg cagccagatg 300
 agagggaggg gaagagagat gggaggaggg ctgggctgag ggtacacagt gtggctgctg 360
 cctggtgccc tgtgaggagg cagggtcctt tctagctggg agcaatggcg catg 414

<210> 565
 <211> 858
 <212> DNA
 <213> Homo sapiens

<400> 565
 cggacgcgtg ggctttaaaa atacaaaaat aatagccttg tcttcttaac ctgcaaaagt 60
 aattttcctg cataatttaa tgttttcatg tggaaacaaat gagaatgctt tagaaagcac 120
 attgtacact gtaaaacttct atacaacgtg gtgatgttat ttttaaagaa aatacaattc 180
 ttaaagtgtg acaagggtgt tagatccctg gatttttgct tagccctacc tttattgttc 240
 tcatcttctg ctgttttaca gataactcct gtatagatat tttctgatcc ccacttagtt 300
 ctaaccttag ttaagctgct tatgaacatt ttaaatattg cagtatttag tctgactttc 360
 cctggagaat atgaagtttc tttagccttt gaaaaatatt tcatgtatac tcatgcattc 420
 ataactctgt tctgtaacag acagtggctt tttaaaagta atagtgaag taatcttagt 480
 agcaatgtta atttatttga ctcttgctag ttttcaggta cgcaaaagga ggagatgatt 540
 tcctttaaaa actcagcttt gaatagttcg tgttatctgg tatatctgaa atattcagaa 600
 atgtttaaac agtttttgtt tgcctttgct gttaaagttg aaacctctta gtgctttcaa 660
 ttgataatcc tggaaaccaa cctcagtatt gttaggaatac atagattatc ggagttttat 720
 agtcttgaaa taaagggtca ataactatga tgattattgct gaaacttaaa atgcaaatg 780

ggttaaggaa cattcaggga ttttcaataa cttggaaacg gaaggaactg ggggtggacag 840
 tttggagggt agattccc 858

<210> 566
 <211> 906
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)...(906)
 <223> n = a,t,c or g

<400> 566
 agcggcccag ttttcgggtc gacccacacg tccgcctcac tctgaccctg atatcttttc 60
 tgctgttaat ctgttctctg agaaaacatc tcaagaagat gcagctccat ggcaaaggat 120
 ctcaagatcc cagcaccaag ggccacataa aagctttgca aactgtgacc tcctttcttc 180
 tgttatgtgc catttacttt ctgtccatga tcatatcagt ttgtaatttt gggaggctgg 240
 aaaagcaacc tgtcttcatt ttctgccaag ctattatatt cagctatcct tcaaccaccc 300
 cattcatcct gattttggga aacaagaagc taaagcagat ttttctttca gttttgcggc 360
 atgtgaggta ctgggtgaaa gacagaagcc ttcgtctcca tagattcaca agaggggcat 420
 tgtgtgtcct ctagcagaaa acaaactggt ggtgtatgaa acattttata tttcttactg 480
 gggtttctgt aatatatgta tatgaataat ttccacatgt atacctagaa aagcttttta 540
 cctaaagtta gtctacaaaa gtacatatat atagatggct gtggtgtgac cgtgtgtgca 600
 catatgtgaa tgtgtatata tcacgcaaca ggagtgtcat tcatgctgct ggcccctggg 660
 gaagtgacaa gtacaattaa aggtggctct gatcccttta aacacctacc aaaccctaaa 720
 tttgattcca aaaggaccat tctgcaaaag gtttgcaaaag atctgggccc acttgtgagc 780
 accaaccctt aaacatgatg cgccagcttc ccaggaggcc ctactcattc ccctacataa 840
 ctatttgatg gcccaccccc taccancccc gcttcccccc acctgaaaaa agcaggccac 900
 agaagc 906

<210> 567
 <211> 1227
 <212> DNA
 <213> Homo sapiens

<400> 567
 tttctgtttt tttttttaat ctgccattag taattaattc tttgaagata ctttgagat 60
 tcattttctt gagtggcact gccatgctca ttcagtgaac acttgtgggg tatagaaatg 120
 gaatggagag tttcaaacag ctttctgtaa actgtacttt gggctccaga cttcactgtc 180
 cttaggcatt gaaaccatca cctggtttgc attcttcatg actgagggtta acttaaaaca 240
 aaaatggtag gaaagctttc ctatgcttcg ggtgaagagac aaatttgctt ttgtagaatt 300
 ggtggctgag aaaggcagac agggcctgat taaagaagac atttgtcacc actagccacc 360
 aagttaagtt gtggaaccca aaggtgacgg ccatggaaac gtagatcacc agctctgcta 420
 agtagttagg ggaagaaaca tattcaaac agtctccaaa tgggacccgt tggttacagt 480
 gaatgaccac tcctgcttta ttttctctga gattgcccag aataacatgg cacttatact 540
 gatgggcaga tgaccagatg aacatcatca tcccaagaat atggaaccac cgtgcttgca 600
 tcaatagatt tttccctgtt atgtaggcat tcttgccatc cattggcact tggctcagca 660
 cagttaggcc aacaaggaca taatagacaa gtccaaaaca gtactgcacg acgtgaatca 720
 tgacattgga gaagacactg acgtagaggc actcgaagag tcttcgtaag ctgtgcagcc 780
 acagaaatag tagcactaag aatgcagaca gtgccagctc ccctccctgg aactgtgccg 840
 ccccagagat tctgagcaaa ccatgaagcc agcttggaac aggtgctccc aggaacagag 900
 attgagtaag gcaccaaagc aggaagccat tccacagcac tgagatgata taaaagtggg 960
 aaaaatatct cttggggaca tcaaaggctc ggacggcgac gggcgcgac ggctccccc 1020
 acttggtttt cccatagcgg atcaggctct ggaagatcgc gcagcccgag agcaggccgg 1080
 gcggcaggag ctgcagcagt agggtcagca ggaaggcggc ggtcagcgtg agccacaccg 1140
 cgcgacggg gttcagcgcg gagtgtctgg cctccgcccc gggagccatg gcccgcgtgc 1200
 cgccttccg cgctgctggc gccccc 1227

<210> 568
 <211> 1450
 <212> DNA
 <213> Homo sapiens

<400> 568
 gcccacgcgt ccgcccacgc gtccggtttcc cagccttggg attttcaggt gttttcattt 60
 ggtgatcagg actgaacaga gagaactcac catggagttt gggctgagct ggctttttct 120
 tgtggctatt ttaaaagggtg tccagtgtga ggtgcagctg gtggagtctg ggggaggctt 180
 ggtacagcct ggggggtccc tgagactctc ctgtgcagcc tctggattca cctttagcag 240
 ctatgccatg agctgggtcc gccaggctcc agggaagggg ctggagtggg tctcaggtct 300
 tagtggtagt ggtggtagta gcacatacta cgcagactcc gtgaagggcc ggttcacat 360
 ctccagagac aattccaagg gcacactgta tctgcaaatg aacagcctga gagccgacga 420
 cacggccaga tattactgtg cgaaagggtg ggttgagctg gcatcaacaa aaccatcctc 480
 tatctggcga ctcaacccaa tcagatactg gtacttcgat ctctggggcc agggaaacct 540
 ggtcacccgc tcgagtggcg atgggtccag tggcggtagc gggggcgcggt cgactggcga 600
 aattgtgttg acgcagtctc caggcaccct gtctttgtct ccaggggaaa gagccaccct 660
 ctcttcaggc gccagtcaga gtgttagcag cagctactta gcctggtacc agcagaaacc 720
 tggccaggct cccaggctcc tcactatgg tgcattccagc agggccactg gcatcccaga 780
 caggttcagt ggcagtgggt ctgggacaga cttcactctc accatcagca gactggagcc 840
 tgaagatttt gcagtgtatt actgtcagca gtatggtagc tcaccgacga cgttcggcca 900
 agggaccaaa gtggatatca aacgaactgt ggtgcacca tctgtcttca tcttccgcc 960
 atctgatgag cagttgaaat ctggaactgc ctctgttgtg tgcctgctga ataacttcta 1020
 tcccagagag gccaaagtac agtgggaagt ggataacgcc ctccaatcgg gtaactccca 1080
 ggagagtgtc acagagcagg acagcaagga cagcacctac agcctcagca gcaccctgac 1140
 gctgagcaaa gcagactacg agaaacacaa agtctacgcc tgcgaagtca cccatcaggg 1200
 cctgagctcg cccgtcacaa agagcttcaa caggggagag tgttagaggg agaagtgcc 1260
 ccacctgctc ctacgttcca gcctgacccc ctccatcctc ttggcctctg accctttttc 1320
 cacaggggac ctacccctat tgcggtcctc cagctcatct ttcacctcac cccctcctc 1380
 ctctctgggt ttaattatgc taatgttggg ggagaatgaa taaataaagt gaatctttgc 1440
 aaaaaaaaaa 1450

<210> 569
 <211> 1450
 <212> DNA
 <213> Homo sapiens

<400> 569
 gcccacgcgt ccgcccacgc gtccggtttcc cagccttggg attttcaggt gttttcattt 60
 ggtgatcagg actgaacaga gagaactcac catggagttt gggctgagct ggctttttct 120
 tgtggctatt ttaaaagggtg tccagtgtga ggtgcagctg gtggagtctg ggggaggctt 180
 ggtacagcct ggggggtccc tgagactctc ctgtgcagcc tctggattca cctttagcag 240
 ctatgccatg agctgggtcc gccaggctcc agggaagggg ctggagtggg tctcaggtct 300
 tagtggtagt ggtggtagta gcacatacta cgcagactcc gtgaagggcc ggttcacat 360
 ctccagagac aattccaagg gcacactgta tctgcaaatg aacagcctga gagccgacga 420
 cacggccaga tattactgtg cgaaagggtg ggttgagctg gcatcaacaa aaccatcctc 480
 tatctggcga ctcaacccaa tcagatactg gtacttcgat ctctggggcc agggaaacct 540
 ggtcacccgc tcgagtggcg atgggtccag tggcggtagc gggggcgcggt cgactggcga 600
 aattgtgttg acgcagtctc caggcaccct gtctttgtct ccaggggaaa gagccaccct 660
 ctcttcaggc gccagtcaga gtgttagcag cagctactta gcctggtacc agcagaaacc 720
 tggccaggct cccaggctcc tcactatgg tgcattccagc agggccactg gcatcccaga 780
 caggttcagt ggcagtgggt ctgggacaga cttcactctc accatcagca gactggagcc 840
 tgaagatttt gcagtgtatt actgtcagca gtatggtagc tcaccgacga cgttcggcca 900
 agggaccaaa gtggatatca aacgaactgt ggtgcacca tctgtcttca tcttccgcc 960
 atctgatgag cagttgaaat ctggaactgc ctctgttgtg tgcctgctga ataacttcta 1020
 tcccagagag gccaaagtac agtgggaagt ggataacgcc ctccaatcgg gtaactccca 1080
 ggagagtgtc acagagcagg acagcaagga cagcacctac agcctcagca gcaccctgac 1140

gctgagcaaa	gcagactacg	agaaacacaa	agtctacgcc	tgcaagtc	cccatcaggg	1200
cctgagctcg	cccgtcacaa	agagcttcaa	caggggagag	tgtagaggg	agaagtggcc	1260
ccacctgctc	ctcagttcca	gcctgacccc	ctcccatcct	ttggcctctg	accctttttc	1320
cacaggggac	ctacccttat	tgcggtcctc	cagctcatct	ttcacctcac	ccccctcctc	1380
ctccttggtc	ttaattatgc	taatgttgga	ggagaatgaa	taaataaagt	gaatctttgc	1440
aaaaaaaaaa						1450

<210> 570
 <211> 1450
 <212> DNA
 <213> Homo sapiens

<400> 570						
gccccacgct	ccgccccacgc	gtccgtttcc	cagccttggg	attttcaggt	gttttcattt	60
ggtgatcagg	actgaacaga	gagaactcac	catggagttt	gggctgagct	ggctttttct	120
tgtggctatt	ttaaaagggtg	tccagtgtga	ggtgcagctg	gtggagtctg	ggggaggctt	180
ggtacagcct	ggggggtccc	tgagactctc	ctgtgcagcc	tctggattca	ccttttagcag	240
ctatgccatg	agctgggtcc	gccaggctcc	aggggaagggg	ctggagtggg	tctcagggtct	300
tagtggtagt	ggtggttagta	gcacatacta	cgcagactcc	gtgaagggcc	ggttcacccat	360
ctccagagac	aattccaagg	gcacactgta	tctgcaaatg	aacagcctga	gagccgacga	420
cacggccaga	tattactgtg	cgaaagggtg	ggttgagctg	gcatcaacaa	aaccatcctc	480
tatctggcga	ctcaacccaa	tcagatactg	gtacttcgat	ctctggggcc	agggaaacct	540
ggtcacctgc	tcgagtggcg	atgggtccag	tggcggtagc	gggggcgcgt	cgactggcga	600
aattgtgttg	acgcagtctc	caggcacctc	gtctttgtct	ccaggggaaa	gagccacctc	660
ctcctgcagg	gccagtcaga	gtgttagcag	cagctactta	gcctggtacc	agcagaaacc	720
tggccaggct	cccaggctcc	tcacttatgg	tgcatccagc	agggccactg	gcatcccaga	780
caggttcagt	ggcagtgggt	ctgggacaga	cttcaacttc	accatcagca	gactggagcc	840
tgaagatttt	gcagtgtatt	actgtcagca	gtatggtagc	tcaccgacga	cgttcggcca	900
agggaccaaa	gtggatatca	aacgaactgt	ggctgcacca	tctgtcttca	tcttcccgcc	960
atctgatgag	cagttgaaat	ctggaactgc	ctctgtgtg	tgctgtctga	ataacttcta	1020
tcccagagag	gccaaagtac	agtggaaggt	ggataacgcc	ctccaatcgg	gtaactccca	1080
ggagagtgtc	acagagcagg	acagcaagga	cagcacctac	agcctcagca	gcaccttgac	1140
gctgagcaaa	gcagactacg	agaaacacaa	agtctacgcc	tgcaagtc	cccatcaggg	1200
cctgagctcg	cccgtcacaa	agagcttcaa	caggggagag	tgtagaggg	agaagtggcc	1260
ccacctgctc	ctcagttcca	gcctgacccc	ctcccatcct	ttggcctctg	accctttttc	1320
cacaggggac	ctacccttat	tgcggtcctc	cagctcatct	ttcacctcac	ccccctcctc	1380
ctccttggtc	ttaattatgc	taatgttgga	ggagaatgaa	taaataaagt	gaatctttgc	1440
aaaaaaaaaa						1450

<210> 571
 <211> 1450
 <212> DNA
 <213> Homo sapiens

<400> 571						
gccccacgct	ccgccccacgc	gtccgtttcc	cagccttggg	attttcaggt	gttttcattt	60
ggtgatcagg	actgaacaga	gagaactcac	catggagttt	gggctgagct	ggctttttct	120
tgtggctatt	ttaaaagggtg	tccagtgtga	ggtgcagctg	gtggagtctg	ggggaggctt	180
ggtacagcct	ggggggtccc	tgagactctc	ctgtgcagcc	tctggattca	ccttttagcag	240
ctatgccatg	agctgggtcc	gccaggctcc	aggggaagggg	ctggagtggg	tctcagggtct	300
tagtggtagt	ggtggttagta	gcacatacta	cgcagactcc	gtgaagggcc	ggttcacccat	360
ctccagagac	aattccaagg	gcacactgta	tctgcaaatg	aacagcctga	gagccgacga	420
cacggccaga	tattactgtg	cgaaagggtg	ggttgagctg	gcatcaacaa	aaccatcctc	480
tatctggcga	ctcaacccaa	tcagatactg	gtacttcgat	ctctggggcc	agggaaacct	540
ggtcacctgc	tcgagtggcg	atgggtccag	tggcggtagc	gggggcgcgt	cgactggcga	600
aattgtgttg	acgcagtctc	caggcacctc	gtctttgtct	ccaggggaaa	gagccacctc	660
ctcctgcagg	gccagtcaga	gtgttagcag	cagctactta	gcctggtacc	agcagaaacc	720
tggccaggct	cccaggctcc	tcacttatgg	tgcatccagc	agggccactg	gcatcccaga	780

cagggttcagt	ggcagtggtt	ctgggacaga	cttcactctc	accatcagca	gactggagcc	840
tgaagatttt	gcagtgtatt	actgtcagca	gtatggtagc	tcaccgacga	cggttcggcca	900
agggacccaaa	gtggatatca	aacgaactgt	ggctgcacca	tctgtcttca	tcttcccgcc	960
atctgatgag	cagttgaaat	ctggaactgc	ctctgtttgt	tgcctgctga	ataacttcta	1020
tcccagagag	gccaaagtac	agtggaaggt	ggataacgcc	ctccaatcgg	gtaactccca	1080
ggagagtgtc	acagagcagg	acagcaagga	cagcacctac	agcctcagca	gcaccctgac	1140
gctgagcaaa	gcagactacg	agaaacacaa	agtctacgcc	tgcgaagtca	cccatcaggg	1200
cctgagctcg	cccgtcacia	agagcttcaa	caggggagag	tgtagagggg	agaagtgtccc	1260
ccacctgctc	ctcagttcca	gcctgacccc	ctcccatcct	ttggcctctg	accctttttc	1320
cacaggggac	ctacccctat	tgcggctctc	cagctcatct	ttcacctcac	ccccctcttc	1380
ctccttggtc	ttaattatgc	taatgttggg	ggagaatgaa	taataaaagt	gaatctttgc	1440
aaaaaaaaaa						1450

<210> 572

<211> 408

<212> DNA

<213> Homo sapiens

<400> 572

ctatatccct	aaactcaaag	ggacatccag	tgctatcaag	acacccaatt	gaacatacac	60
atatgttccc	cccttacttt	tctcttattt	tacttctatt	cacttttgct	tcgaaattct	120
ttctgtctct	gaacctgaaa	aaaagcaaca	tagttaaagc	aagaattgag	agtacaaaga	180
cagtgatatc	aaagagatgt	taatcctcca	cacagtctgg	ctgcattgag	gatattttct	240
tttgtgcagt	agaaaactgg	aaatagctaa	gtctattgga	actcttcttt	ctcaaattct	300
attgaactga	agagtaggaa	atttagaaac	agtaagacgt	gggagataat	ttaactgaat	360
tcactacttt	tgtgacaagg	atatccagag	gaactcaggg	acttgccc		408

<210> 573

<211> 640

<212> DNA

<213> Homo sapiens

<400> 573

cacttcttca	tcattccatc	agaaccttat	aatgaatttg	atgcagattg	cttttgaggg	60
gtttatctct	cagtcctaaa	catatagggg	catgttagaa	aatttgggat	tctaggtgtg	120
atgcctgaaa	agggactgat	ataactgagc	atggctatgc	agtctgtgat	aagaaaacaa	180
ttcacagctc	tagctggctt	ctgcttctgg	ttctgtctct	ttaccttagc	agtcctgagt	240
ctcaccttgc	ttatctgcaa	actgaggata	atgccattta	aacttgaagg	tttgtttcaa	300
gaattaaata	aatcatggca	tatgaagctc	ttgtcacaag	atagggagtt	aataaatatg	360
ctgttgctct	taatgggcag	gtcctaagtg	atggcttaga	aacctaaagt	tggaggcat	420
cttggagatg	ttctggctca	acctcctaac	aatgcaaaag	tttgtcctag	aacactcctg	480
gaagatggat	ctttatgtct	tcattagata	accagggat	cccactgtct	cagaaggcag	540
tctgtgcata	ttttttggca	ggtctaattc	ttaatgataa	taacacacat	tttatttgtg	600
gttacgaaat	gcttttacgt	cattatatta	actgaactgt			640

<210> 574

<211> 3967

<212> DNA

<213> Homo sapiens

<400> 574

cgccccccgc	cgccgctgca	caccggaccc	agccgccgtg	ccgcgggcca	tggacctgcc	60
cagggggcctg	gtgggtggcct	gggcgctcag	cctgtggcca	gggttcacgg	acaccttcaa	120
catggacacc	agggaagcccc	gggtcatccc	tggctccagg	accgccttct	ttggetacac	180
agtgcagcag	cacgacatca	gtggcaataa	gtggctggtc	gtgggcgccc	cactggaaac	240

caatggctac	cagaagacgg	gagacgtgta	caagtgtcca	gtgatccacg	ggaactgcac	300
caaactcaac	ctgggaaggg	tcaccctgtc	caacgtgtcc	gagcggaaaag	acaacatgcg	360
cctcggcctt	agtctcgcca	ccaaccccaa	ggacaacagc	ttcctggcct	gcagccccct	420
ctgggtctcat	gagtggtgga	gctcctacta	caccacaggg	atgtgttcaa	gagtcaactc	480
caacttcagg	ttctccaaga	cogtggcccc	agctctccaa	aggtgccaga	cctacatgga	540
catcgtcatt	gtctcggatg	gctccaacag	catctacccc	tgggtggagg	ttcagcactt	600
cctcatcaac	atcctgaaaa	agttttacat	tggcccaggg	cagatccagg	ttggagttgt	660
gcagtatggc	gaagatgtgg	tgcattgagtt	tcacctcaac	gactacaggt	ctgtaaaaga	720
tgtggtggaa	gctgccagcc	acattgagca	gagaggagga	acagagaccc	ggacggcatt	780
tggcattgaa	tttgcacgct	cagaggcttt	ccagaagggt	ggaaggaaaag	gagccaagaa	840
ggtgatgatt	gtcatcacag	atggggagtc	ccacgacagc	ccagacctgg	agaagggtgat	900
ccagcaaaagc	gaaagagaca	acgtaacaag	atatgcggtg	gccgtcctgg	gctactacaa	960
ccgcaggggg	atcaatccag	aaacttttct	aaatgaaatc	aaatacatcg	ccagtgacct	1020
tgatgacaag	cacttcttca	atgtcactga	tgaggctgcc	ttgaaggaca	ttgtcgatgc	1080
cctgggggac	agaatcttca	gcctggaagg	caccaacaag	aacgagacct	cctttgggct	1140
ggagatgtca	cagacgggct	tttcctcgca	cgtggtggag	gatgggggtc	tgctgggagc	1200
cgtcgggtgc	tatgactgga	atggagctgt	gctaaaggag	acgagtgcgc	ggaaggctcat	1260
tcctctccgc	gagtcctacc	tgaagagttt	ccccgaggag	ctcaagaacc	atggtgcata	1320
cctgggggtac	acagtcacat	cggctcgtgtc	ctccaggcag	gggcgagtg	acgtggccgg	1380
agcccccccg	ttcaaccaca	cgggcaagg	catcctgttc	acatgcaca	acaaccggag	1440
cctcaccatc	caccaggcta	tgcggggcca	gcagataggc	tcttactttg	ggagtgaat	1500
cacctcggtg	gacatcgacg	gcgacggcgt	gactgatgtc	ctgctggtgg	gcgcacccat	1560
gtactttcaac	gagggccgtg	agcgaggcaa	ggtgtacgtc	tatgagctga	gacagaaccg	1620
gtttgtttat	aacggaacgc	taaaggattc	acacagttac	cagaatgccc	gatttgggtc	1680
ctccattgcc	tcagttcgag	acctcaacca	ggattcctac	aatgacgtgg	tggtgggagc	1740
ccccctggag	gacaaccacg	caggagccat	ctacatcttc	cacggcttcc	gaggcagcat	1800
cctgaagaca	cctaagcaga	gaatcacagc	ctcagagctg	gctaccggcc	tccagtattt	1860
tggctgcagc	atccacgggc	aattggacct	caatgaggat	gggtccatcg	acctggcagt	1920
gggagccctt	ggcaacgctg	tgattctgtg	gtcccgccca	gtggttcaga	tcaatgccag	1980
cctccacttt	gagccatcca	agatcaacat	cttccacaga	gactgcaagc	gcagtggcag	2040
ggatgccacc	tgcctggccg	ccttccctctg	cttcaagccc	atcttctctg	caccccatct	2100
ccaaacaaca	actgttggca	tcagatataa	cgcaccatg	gatgagaggc	ggtatacacc	2160
gaggggccac	ctggacgagg	gcggggaccg	attcaaccaac	agagccgtac	tgctctctct	2220
cggccaggag	ctctgtgagc	ggatcaactt	ccatgtcctg	gacactgctg	actacgtgaa	2280
gccagtgacc	ttctcagtcg	agtattccct	ggaggaccct	gaccatggcc	ccatgctgga	2340
cgacggctgg	cccaccactc	tcagagtctc	ggtgcccttc	tggaacggct	gcaatgagga	2400
tgagcactgt	gtccctgacc	ttgtgttggg	tgcccgaggt	gacctgccc	cggccatgga	2460
gtactgccag	aggggtctga	ggaagcctgc	gcaggactgc	tccgcataca	cgctgtcctt	2520
cgaccaccaca	gtcttcatca	tagagagcac	acgccagcga	gtggcggtgg	aggccacact	2580
ggagaacagc	ggcgagaacg	cctacagcac	ggtccctaaat	atctcgagct	cagcaaacct	2640
gcaagtttgc	agcttgatcc	agaaggagga	ctcagacggt	agcattgagt	gtgtgaacga	2700
ggagaggagg	ctccagaagc	aagtctgcaa	cgtcagctat	cccttcttcc	gggccaaggc	2760
caaggtggct	ttccgtcttg	atcttgagtt	cagcaaatcc	atcttccctac	accacctgga	2820
gatcgagctc	gctgcaggca	gtgacagtaa	tgagcgggac	agcaccaagg	aagacaacgt	2880
ggccccctta	cgcttccacc	tcaaatacga	ggttgacgtc	ctcttcacca	ggagcagcag	2940
cctgagccac	tatgaggtca	agcccaacag	ctcgctggag	agatacgatg	gtatcgggcc	3000
tccttccagc	tgcatcttca	ggatccagaa	cttgggcttg	ttccccatcc	acgggatgat	3060
gatgaagatc	accattccca	tgcgccacag	gagcggcaac	cgctactga	agctgaggga	3120
cttcctcagc	gacgaggcga	acacgtcctg	taacatctgg	ggcaatagca	ctgagtaccg	3180
gcccacccca	gtggagggaag	acttgctcgt	tgctccacag	ctgaatcaca	gcaactctga	3240
tgctgtctcc	atcaactgca	atatacggct	ggtccccaac	caggaaatca	atttccatct	3300
actggggaac	ctgtggttga	ggtccctaaa	agcactcaag	tacaaatcca	tgaaaatcat	3360
ggtcaacgca	gccttgcaga	ggcagttcca	cagccccctc	atcttccgtg	aggaggatcc	3420
cagccgcccag	atcgtgtttg	agatctccaa	gcaagaggac	tggcagggtcc	ccatctggat	3480
cattgtaggc	agcaccctgg	ggggcctcct	actgctggcc	ctgctgggtc	tggcactgtg	3540
gaagctcggc	ttcttttagaa	gtgccaggcg	caggaggagg	cctgggtctgg	acccacccc	3600
caaagtgctg	gagttaggct	ccagaggaga	ctttgagttg	atgggggcca	ggacaccagt	3660
ccaggtagtg	ttgagaccga	ggcctgtggc	cccaccgagc	tggagcggag	aggaagccag	3720
ctggctttgc	acttgacctc	atctcccgag	caatggcgcc	tgctccctcc	agaatggaac	3780
tcaagctggt	tttaagtggg	actgccctac	tgggagactg	ggacaccttt	aacacagacc	3840
cctagggatt	taaagggaca	cccctacaca	caccagggcc	cagccaagg	cctccctcag	3900
gctctgtgga	gggcatttgc	tgccccagct	actaagggtg	taggaattcg	taatcatccc	3960
cattctc						3967

<210> 575
 <211> 934
 <212> DNA
 <213> Homo sapiens

<400> 575
 ctaattttcta attcttctgt agcatttatt aagaaaagtt aaaataactg cttaatttga 60
 gatgaaatta acacatgaga acttcactca ttaggtggta tgttctgtga ctgttgttta 120
 atgtgtattt tatggcagtt ttgactgcca ttttgtcatt tgagaaaggt gaaatgaagt 180
 actattttgg gctgcgaaac ctgaagtgtt agggaaacct gtgtttgaag accattaaga 240
 agttgttttg catactaaga atggcactga acatcattat caatcctgtg tggttttgcc 300
 actgcttgac ttgcacaatt cacattgatt ttcatatttt attcattaaa atttttaaac 360
 acatgttttt taggtcgctt tggtcactct ggcttagcca tcaacttgat cacatatgat 420
 gatcgcttca acctgaaaag tattgaggag cagctgggaa cagaaattaa acctattccg 480
 agcaacattg ataagagcct gtatgtggca gaataccaca gcgagcctgt agacgatgag 540
 aaaccttaac aagcatgtac gtccctgaca gaacagctaa caggaaacctt taaatgaggg 600
 aaatcaaaat cttcttttct gggggaaaat tgggtgccaca cccttttcta ttacccttaa 660
 aggttaccac acccccttag cctcaactga ccgctcatal ccacctcct cctcgcgggg 720
 tctgtcacc taccatccg cacacccccc caaccgacct tcctttgctg gcctcacttc 780
 ccccgccat actgtgtccc tttcttacta ctccactct agtcccggcg tgaccatcaa 840
 aacgatcgca ccttactca cagttcacgc cctaccgca cactcgtgt gactacctct 900
 cagagccgcg tgcgcgcctg acactctcgt gccg 934

<210> 576
 <211> 634
 <212> DNA
 <213> Homo sapiens

<400> 576
 agaccagcgg ccacccacgc gtccggtctg aatcttattc cttttagat ggccattttt 60
 cctcttttga agggggtgaa tgttttggta tgcattttt cctcattcat catgctgaat 120
 atttactgta cctttttgat ctggaaattt atttattcag cttttttctg ttatattact 180
 tctttgatga ttttccctt tagtttttct tgttctttct ttctagacct tcttaaagtc 240
 atagtttata tcttcttctt ttatctgtac tcctcaagat aaatgctaga agttggttaa 300
 gccaggactt aaaccagct tgtagcttta taagctgggt ttgaaacctc agttttctag 360
 ttagtaaaagt gatcatgaga ataacgacct caaaggatat catgaggatt aaattagatt 420
 tttttaaagt ccttagcact atgccagta catacagcat tcaataatgt taggaattgt 480
 tgctgtcatg ttcactatta atttatttaa caaatattta ttgaatgcta atacaaatgt 540
 gccatgctct tctaggtgac cccagtaag gttagaggact aagaagacat gagatttatg 600
 tgaaaagca tttttaaaga agaccattgg caat 634

<210> 577
 <211> 810
 <212> DNA
 <213> Homo sapiens

<400> 577
 gtacactgcg gtggaattcc cgctttttga ggctcagtt ttctcatct gcaaaaccag 60
 cctaattgat ctatagagtt gttatagaaa gttgaatctt tgtcatctat tgaatgcttg 120
 aaatttagct aaaagtgtct caggagatgg gctaccttct gtggttagta ctgtctatct 180
 tgggtgtgac agaattggga cttggcaggt tgacctccc tctggattca gaaagcccca 240
 ggacttctta taaagttagg ccatgggtcg tcttgaggc ttgggtctcg taaataattg 300
 agcctgagct cacaactctg cccctgggtc caggtggctg gtctgtgcc cccaaaagcc 360
 tgaccttctt ggtcctgtgg gtctgtcagt aaggcaggta gccatagctg gagagagaca 420
 gccaccaggc tgggatcttg gacagtcctt acatttctgt gtaatcctgg actaggcagg 480

gcatggagta	gatggaaaat	ggcggccatc	ttggaaatgt	gccataacaa	ctcacttttc	540
aagaccgtcc	cctagaggag	aaaagtcccc	ccctgggtag	tcaattaacg	aattttcaag	600
accccgcgct	tgcgctccta	gccggagatt	ccacgagaga	ttttaatctg	acgccagagt	660
ggatcacaga	gcggaacggg	atacactgaa	aaagaccggg	caggagtgc	gtcgcgaccc	720
cctcttggtg	gaaaaggacg	actgctgccc	ctggagatcg	tggaggccaa	taaccacgcg	780
gacgccatgt	tgaccgcgca	gagcgggccc				810

<210> 578
 <211> 810
 <212> DNA
 <213> Homo sapiens

<400> 578						
tttttttttt	ttatgtatc	attgctttat	ttgtcctttt	cacgggtcac	tacatttttag	60
ggcattttgat	ctataattgg	tagaacaggt	ttcaggcagg	gaggatagga	gcatcatctt	120
ccatccccat	ccacctccgc	tctttatctt	gatgtcacac	caagtgtgat	agcgctccca	180
gcagtttctt	cacagcttca	gaagcctctg	gtcccagctc	atttacacac	ttccttagcc	240
cctccacaag	gtgctcaaca	gaaatgcccc	gagttttcag	aagaagcttt	aatggatcca	300
taaagggaag	aatggtgtcc	agaggtaaag	gtgccaaact	gtcaacagga	aggggcactt	360
tgttgatgag	gaaggcagta	gctgcaggaa	aaagagaaac	cagggtgagac	aggcacatct	420
gggccacagac	tatgacctca	tcttctttcc	ctgtgtccat	caatagctcc	attccagatc	480
cactcatctt	acttccattg	aaaacttcta	cctctggccc	tttgacactg	ctgttccatc	540
tccctagaac	tttttttctt	tagctagcta	cttaccttcc	tttctcacat	tatttggctt	600
ctcttcaaat	attacctcct	cggagaagcc	tgcaatggcc	atagtcactc	tccgtcattt	660
attttttctt	accattacct	aaaaaaagca	actcttcatt	tgtgtttttt	attgtcttta	720
ttttctcatt	agaatggagg	ctccatgaga	acaaggaatg	tgtgtttttt	cgctaatagca	780
cccatgccta	caactggaat	tccaccacag				810

<210> 579
 <211> 1825
 <212> DNA
 <213> Homo sapiens

<400> 579						
ctcaggaagc	agcatcgag	gtgcctcagc	catggcatgg	atccctctct	tcctcggcgt	60
ccttgcttac	tgacacggg	ccgtggcctc	ctatgagctg	actcagccac	cctcagtgtc	120
cgtgtcccca	ggacagacag	ccagcatcac	ctgctctgga	gatagattgg	gggataaaat	180
tgcttgctgg	tatcagctga	agccaggcca	gtccccttta	gtggtcatcc	atcaagatac	240
caagcggccc	tcagggatcc	ctgagcgatt	ctctggctcc	aactctggga	acacagccac	300
tctgaccatc	agcgggaccc	aggctatgga	tgaggctgac	tattactgtc	aggcgtggga	360
cagcagctct	tatgtggcgt	tcggcggagg	gaccaagctg	accgtcctag	gtcagcccaa	420
ggctgccccc	tcggctactc	tgttcccgcc	ctcctctgag	gagcttcaag	ccaacaaggc	480
cacactgggtg	tgtctcataa	gtgacttcta	cccgggagtc	gtgacagtgg	cctggaaggc	540
agatagcagc	cccgtcaagg	cgggagtgga	gaccaccaca	ccctccaaac	aaagcaacaa	600
caagtacgcg	gtcagcagct	atctgagcct	gacgcctgag	cagtggaaat	cccacagaag	660
ctacagctgc	caggtcacgc	atgaaggag	caccgtggag	aagacagtgg	cccctacaga	720
atatttattg	agggtttatt	gagtgcaggg	agaagggtct	gatgccttgg	ggtgggagga	780
gagacccctc	ccctgggatc	ctgcagctct	agtctcccgt	ggtggggggt	gagggatgag	840
aacctatgaa	cattctgtag	gggccactgt	cttctccacg	gtgctccctt	catgcgtgac	900
ctggcagctg	tagcttttgt	gggacttcca	ctgctcaggc	gtcaggctca	ggtagctgct	960
ggccgcgtac	ttgttgttgc	tttgtttgga	gggtgtggtg	gtctccactc	ccgccttgac	1020
ggggtgctga	tctgccttcc	aggccactgt	cacggctccc	gggtagaagt	cacttatgag	1080
acacaccagt	gtggccttgt	tggttgaag	ctcctcagag	gaggggtggga	acagagtgc	1140
cgagggggca	gccttgggct	gaccagagtc	actggcttgt	tgcatagggt	cagggatgcc	1200
atggcaggga	cctggcatct	gaccaagagc	ggacctatcc	cctgtcccgg	accagcaact	1260
cttttagcca	gagactggag	cagacacaga	aggcatgcga	gaagtgccgt	gtgatgcgtg	1320
gttaggtttc	tggcagctgt	agcttctgtg	ggacttccac	tgctcaggcg	tcaggctcag	1380
gtagctgctg	gcgcgctact	tgttgttgct	ttgtttggag	ggtgtgggtg	tctccactcc	1440

cgcccttgacg	gggctgctat	ctgccttcca	ggccactgtc	acggatcccc	ggtagaagtc	1500
acttatgaga	cacaccagt	tggccttggt	ggcttgaagc	tcctcagagg	agggcgaggaa	1560
cagagtgacc	gagggggcag	ccttgggctg	acttaggacg	gtcagcttgg	tcctcccgcc	1620
gaataccacg	agagcactgc	tgtcccacgc	ctgacagtaa	tagtcagcct	catccaaagg	1680
ctgcgtcccc	ctgatggtca	gagtggccgt	gttgccagac	ttggaggcgg	agaatcggtc	1740
agggatccct	gagggccgct	tccaatcttg	atagatgacc	atcacagggg	actggcctgt	1800
cctctgctga	taccagccag	tagat				1825

<210> 580

<211> 5801

<212> DNA

<213> Homo sapiens

<400> 580

cgaccatgag	agataaggac	tgagggccag	gaaggggaag	cgagcccgcc	gagaggtggc	60
ggggactgct	cacgccaaag	gccacagcgg	ccgcgctccg	gcctcgctcc	gccgctccac	120
gcctcgcggg	atccgcgggg	gcagcccgcc	cgggcgggga	tgccggggct	ggggcgagg	180
gcgcagtgcc	tgtgctggtg	gtgggggctg	ctgtgcagct	gctgcgggcc	cccgcgctg	240
cgcccgccct	tgcccgctgc	cgcgcccgcc	gccgcggggg	ggcagctgct	gggggacggc	300
gggagccccc	gccgcacgga	gcagcccgcc	ccgtcgccgc	agtcctctct	gggttctctg	360
taccggcgcc	tcaagacgca	ggagaagcgg	gagatgcaga	aggagatctt	gtcggtgctg	420
gggctccccg	accggccccg	gccccctgc	ggcctccaac	agccgcagcc	cccggcgctc	480
cggcagcagg	aggagcagca	gcagcagcag	cagctgcctc	gcggagagcc	ccctcccggg	540
cgactgaagt	ccgcgcccc	cttcatgctg	gatctgtaca	acgcccgtgc	cgccgacaa	600
gacgaggacg	gggcgtcgga	gggggagagg	cagcagtcct	ggccccacga	agcagccagc	660
tcgtcccgag	gtcggcagcc	gcccccgggc	gccgcgcacc	cgctcaaccg	caagagcctt	720
ctggcccccg	gatctggcag	cggcggcgcg	tcgccactga	ccagcgcgca	ggacagcgcc	780
ttcctcaacg	acgggacat	ggtcatgagc	tttgtgaacc	tggtggagta	cgacaaggag	840
ttctccctct	gtcagcgaca	ccacaaagag	ttcaagttca	acttatccca	gattcctgag	900
ggtgaggtgg	tgacggctgc	agaattccgc	atctacaagg	actgtgttat	ggggagtttt	960
aaaaacaaaa	cttttcttat	cagcatttat	caagtcttac	aggagcatca	gcacagagac	1020
tctgacctgt	ttttgttggg	caccctgtga	gtatgggcct	caaaagaagg	ctggctggaa	1080
tttgacatca	cgggccactag	caatctgtgg	gttgtgactc	cacagcataa	catggggctt	1140
cagctgagcg	tggtgacaag	ggatggagtc	cacgtccacc	cccagagccg	aggcctgggtg	1200
ggcagagacg	gcccttacga	caagcagccc	ttcatgggtg	ctttcttcaa	agttagtgag	1260
gtccacgtgc	gcaccaccag	gtcagcctcc	agccggcgcc	gacaacagag	tcgtaatcgc	1320
tctaccagct	cccaggacgt	ggcgcggtgc	tccagtgcct	cagattacaa	cagcagtgaa	1380
ttgaaaacag	cctgcaggaa	gcagtagctg	tatgtgagtt	tccaagacct	gggatggcag	1440
gactggatca	ttgcacccaa	gggctatgct	gccaatctat	gtgatggaga	atgctccttc	1500
ccactcaacg	cacatatgaa	tgcaaccaac	cacgcgattg	tgacagacct	ggttcacctt	1560
atgaaccccc	agtatgtccc	caaaccgtgc	tgtgcgccaa	ctaagctaaa	tgccatctcg	1620
gttctttact	ttgatgacaa	ctccaatgtc	attctgaaaa	aatacaggaa	tatggttgta	1680
agagcttggt	gatgccacta	actcgaaaac	agatgctggg	gacacacatt	ctgccttgga	1740
ttcctagatt	acatctgcct	taaaaaaaca	cggaagcaca	gttgagggtg	ggacgatgag	1800
actttgaaac	tatctcatgc	cagtgccctta	ttaccagga	agatttttaa	ggacctcatt	1860
aataatttgc	tcacttggtg	aatgacgtga	gtagttgttg	gtctgtagca	agctgagttt	1920
ggatgtctgt	agcataaggt	ctggtaactg	cagaaacata	accgtgaagc	tcttcctacc	1980
ctcctcccc	aaaaaccac	caaaattagt	tttagctgta	gatcaagcta	tttgggggtg	2040
ttgttagtaa	atagggaaaa	taatctcaaa	ggagttaa	gtattcttgg	ctaaaggatc	2100
agctggttca	gtactgtcta	tcaaaggtag	attttacaga	gaacagaaat	cggggaagtg	2160
gggggaacgc	ctctgttcag	ttcattccca	gaagtccaca	ggacgcacag	cccaggccac	2220
agccagggct	ccacggggcg	cccttgcttc	agtcattgct	gttgtagttt	cgtgctggag	2280
ttttgttggt	gtgaaaatac	acttatttca	gccaaaacat	accttttcta	cacctcaatc	2340
ctccatttgc	tgtactcttt	gctagtacca	aaagtagact	gattacactg	aggtgaggct	2400
acaagggggt	tgtaacctgt	taacacgtga	aggcaatgct	cacctcttct	ttaccagaac	2460
ggttctttga	ccagcacatt	aacttctgga	ctgcgggtgc	tagtaccttt	tcagtaaagg	2520
ggatctctgc	ctttttacta	tacagcatac	cagccacacg	ggtagaacc	aacgaagaaa	2580
ataaaatgag	ggtgcccagc	ttataagaat	ggtgttaggg	ggatgagcat	gctgtttatg	2640
aacggaaatc	atgatttccc	ttgtagaaag	tgaggctcag	attaaatttt	agaatatatt	2700
ctaaatgtct	ttttcacaa	catgtactgg	gaaggcaatt	tcatactaaa	ctgattaaat	2760
aatacattta	taactacaa	ctgtttgcac	ttacagcttt	ttttgtaaat	ataaactata	2820

atttattgtc	tattttatat	ctgttttgct	gtaacattga	aggaaagacc	agacttttta	2880
aaaaaaagag	tttattttaga	aagtatcata	gtgtaaacia	acaaattgta	ccactttgat	2940
tttcttgga	tacaagactc	gtgatgcaaa	gctgaagtgt	tgtgtacaag	actcttgaca	3000
gttggtgctc	tctaggaggt	tgggtttttt	taaaaaaaga	attatctgtg	aaccatacgt	3060
gattaataaa	gatttccttt	aaggcagagg	ctggctcgaga	tgtgtgtgtt	atcttctgcc	3120
tcagacagac	agtataagt	gtcttgtttc	taagattcct	accaccagtt	actttgggcc	3180
aagtatccac	atccccctgc	gtatgggagg	tgggtgaaga	gtgttggtg	caaagtgggt	3240
attatgggaa	gtagctcgat	ggtaaaagga	caaacaccta	tctatcttag	agcttaagcc	3300
tgtatgtgct	tattcccaag	ggagatagag	gtgtttaatc	acaaggacag	catgagttag	3360
aggacactgg	catcaacagc	tgccacagcc	gtgcacacca	gggccagagc	agccactga	3420
catctgtctt	tggctcttgag	atcaaatgca	tcccatctct	catacattag	aaggtcgacc	3480
tccttggaagc	agaccaagta	tagcaagcct	ctaaaaggac	ttactgagaa	acagaatcag	3540
aaactctaga	actctagtta	gggcccttca	gcagggtgct	agagcctccc	tggataccca	3600
ggcctgggaa	agcctgtctg	gtcttgtcac	cccagggtgac	aaatacaact	ggaatctttc	3660
aatgagttaa	tgagatactg	agaatgagcc	tcgtggaatt	ttccatgcct	accctttcta	3720
aggaagacat	ccaacagttc	atgtgggctc	tggcttctgt	ttacatgag	gaactaaaga	3780
catgtttcac	cccgtgagaa	acagaaggat	cccctgaaca	gtaactgatt	tgacaagtat	3840
cgacacataa	agttatggca	tcagcattct	cttactcagg	cacggtcaga	agtaacgctg	3900
ctttcatcac	gactaacctc	tcacactgag	agaagtattc	acagcaacag	aagctccagc	3960
agcgccgctg	aaggtatctt	ccagaggtgt	gggtttttgc	atttcaatct	gctccatgct	4020
acggaccaac	acagtattga	gtcaactgtg	accttaagat	cagaggaacg	tcaatactgc	4080
cacaaggcca	cctttccaga	actcgtgggc	aggtaacta	tgctttggat	gtgctttctt	4140
tcaccaaaat	cactcaactc	aggagccaca	aatagtccag	caatttcatt	tccctcaatg	4200
ctattttagt	ctcaaaggaa	accatgtaaa	tttcatcaag	agaagggtcaa	aggggatata	4260
tcgccactga	aaatgtttac	acagtgaaca	tgagttacac	atttacttag	agaaaacttaa	4320
cttaataaag	aatctgtaga	gtgtgttggc	ttggaaaaca	cacacacaaa	gaagatacct	4380
cacgcttagt	atgttctgct	ttctgaacag	ccaccactgg	gaaccagtg	gcctctgtgg	4440
gactgaactc	ctaaaacgcag	gggtcgggag	ctgggcagga	gaggtgacct	ccaactgtgt	4500
tcctaaagtt	catctttcgc	ttggctcagg	acaaagcggt	gtaacgagtc	aaggtctctg	4560
cctccactgt	gctcactgac	tttcttccct	cctcggaaaa	gcaataacgt	ggggtagcct	4620
cgtaccgaat	acttgtcgca	gatattccgt	tcagcagtg	agtctacttc	ggcgatcttg	4680
accccgccca	gaccaggga	ttccttttta	gagagttcct	cccaagtagg	agccagagtc	4740
ttacaatgac	cacaccatgg	agcataaaac	ttgatgaagg	ttattccttc	tgcaatggtg	4800
tcacgaagt	tattttcagt	gagtgccaac	acagtgcctt	tgctcagctc	gggctcagct	4860
gccagcacgg	gggcctctga	gggcgtgacg	gtctccgtcg	ctccagtctc	tgtgcgctgc	4920
agctgcgact	ccacgtactc	cctcagtgc	tccaaatccc	gctttccctt	gtactgatcc	4980
acctttttcc	catctcgga	ccagagaaga	gtgggatagc	cacgaacctg	gtttccggag	5040
cagagtccat	agtgtgtgtg	acaatcaacc	ttgccaatct	tgacagtttc	ggaatgttca	5100
aggcccgag	ccagctgctc	ccaggttggg	gccagggctt	tgacgtgacc	acaccacgga	5160
gcgaagaact	tgataaaagt	gtcgccttgt	gcaacgtgca	gctcaaagtt	gcttgctgag	5220
agctcatata	gcccttgctt	gagctcgggg	gcactgggag	gttccacttc	cggctctggt	5280
gtcactggct	cctcgttcag	tgtctgcagc	atccagtttt	ccagtgtctg	gaagtcccga	5340
ggaccctggt	acttcacagc	ttcttgccct	ggcttgaaaa	gctttaaggt	ggggtatcct	5400
cgcaccccc	gggcggagca	cacgtcgag	tgggcctgct	agtccacttt	agccacatag	5460
actttggcat	cttccatgct	gttgattttg	tctcccaggt	cattccaagt	cggctgcagc	5520
cgctggcagt	gtccacacca	gggcgcgaag	aacatgacga	agtgcgcggc	gctctggatc	5580
ccgtgcgtga	acatgtcggc	cgtgtacagg	tgcttgctgt	gcgggtcctg	tccgtcctcg	5640
ccgtctgcgg	cggggggccc	gtccgcccgc	gccgcgcgg	cctcctgggc	ccgggcgcgc	5700
cagcgcccg	cgccgccatg	gcccagcagc	agcagcagca	gcgcagtcag	ggccgcgcgc	5760
cgggcccagca	gcgggaggag	gcgtcctggg	cgcgcgggca	t		5801

<210> 581

<211> 1105

<212> DNA

<213> Homo sapiens

<400> 581

tttcgtatgg	gctgcaggct	gctctgctgt	gcggttctct	gtctcctggg	agcgggtccc	60
atggaaacgg	gagttacgca	gacaccaaga	cacctggtca	tgggaatgac	aaataagaag	120
tctttgaaat	gtgaacaaca	ctctgggcat	aacgctatgt	attgggtaca	gcaaagtgtc	180
aagaagccac	tggagctcat	gtttgtctac	aactttaaag	aacagactga	aaacaacagt	240

gtgccaaagtc	gctttctcacc	tgaatgcccc	aacagctctc	acttattcct	tcacctacac	300
accctgcagc	cagaagactc	ggccctgtat	ctctgtgcc	gcagccaagt	tgggggttac	360
aatgagcagt	tcttcggg	agggacacgg	ctcaccgtgc	tagaggacct	gaaaaacgtg	420
ttcccacccg	aggctcgctgt	gtttgagcca	tcagaagcag	agatctccca	cacccaaaag	480
gccacactgg	tatgcctggc	cacaggcttc	taccccgacc	acgtggagct	gagctggtgg	540
gtgaatggga	aggaggtgca	cagtgggggtc	agcacagacc	cgcagcccct	caaggagcag	600
cccgcctca	atgactccag	atactgcctg	agcagccgcc	tgagggtctc	ggccaccttc	660
tggcagaacc	cccgaacca	cttcgcctgt	caagtccagt	tctacgggct	ctcgagaaat	720
gacgagtga	cccaggatag	ggccaaacct	gtcaccacaga	tcgtcagcgc	cgaggcctgg	780
ggtagagcag	actgtggctt	cacctccgag	tcttaccagc	aagggggtgt	ctctgccacc	840
atcctctatg	agatcttgc	agggaaggcc	accttgtatg	ccgtgctgg	cagtgccttc	900
gtgctgatgg	ccatgggtcaa	gagaaaggat	tccagaggct	agctccaaaa	ccatcccagg	960
tcattcttca	tcctcaccca	ggattctcct	gtacctgtctc	ccagatctgt	gttctctaaaa	1020
gtgattctca	ctctgtctct	catctctctac	ttacatgaat	acttctctct	ttttctctgt	1080
tcctgaaga	ttgagctcca	acccc				1105

<210> 582

<211> 1697

<212> DNA

<213> Homo sapiens

<400> 582

cctggcggat	ggagacatgc	tgccccctgct	gctgctgccc	ctgctgtggg	gggggtccct	60
gcaggagaag	ccagtgtacg	agctgcaagt	gcagaagtgc	gtgacggtgc	aggagggcct	120
gtgctgtcct	gtgcccctgct	ccttctctta	cccctggaga	tctctgtatt	cctctccccc	180
actctacgtc	tactgggtcc	gggacgggga	gateccatac	tacgtctagg	ttgtggccac	240
aaacaaccca	gacagaagag	tgaagccaga	gacccagggc	cgattccgcc	tccttgggga	300
tgtccagaag	aagaactgct	ccctgagcat	cggagatgct	agaatggagg	acacgggaag	360
ctatttcttc	cgcgtggaga	gaggaaggga	tgtaaaatat	agctaccaac	agaataagct	420
gaacttggag	gtgacagccc	tgatagagaa	acccgacatc	cactttctgg	agcctctgga	480
gtccggccgc	cccacaaggc	tgagctgcag	ccttccagga	tctgtgaag	cgggaccacc	540
tctcacattc	tcttggacgg	ggaatgcct	cagccccctg	gaccccgaga	ccacccgctc	600
ctcgagctc	accctcacc	ccaggcccga	ggaccatggc	accaacctca	cctgtcagat	660
gaaacgccaa	ggagctcagg	tgaccacgga	gagaactgtc	cagctcaatg	tctcctatgc	720
tcacagacc	atcaccatct	tcaggaacgg	catagcccta	gagatcctgc	aaaacacctc	780
ataccttccg	gtcctggagg	gccaggctct	gcggtgtctc	tgtgatgtct	ccagcaaccc	840
ccctgcacac	ctgagctggt	tcaggggctc	ccctgcctg	aacgccaccc	ccatctccaa	900
taccgggatc	ttggagcttc	gtcagtaag	gtctgcagaa	gaaggaggct	tcacctgccc	960
cgtctcagac	ccgttgggct	ccctgcaaat	ttttctgaat	ctctcagttt	actccctccc	1020
acagttgtctg	ggccccctcct	gtccttggga	ggctgagggt	ctgcaactgca	gatgctcctt	1080
tcgagcccgg	ccggccccct	ccctgtgctg	gcggttgag	gagaagccgc	tggaggggaa	1140
cagcagccag	ggctcattca	aggtcaactc	cagctcagct	gggcccctggg	ccaacagctc	1200
cctgatcctc	cacggggggc	tcagctccga	cctcaaagtc	agctgcaagg	cctggaacat	1260
ctatgggtcc	cagagcggct	ctgtcctgct	gctgcaagg	agatcgaaac	tcgggacagg	1320
agtggttcct	gcagcccttg	gtggtgctgg	tgtcatggcc	ctgctctgta	tctgtctgtg	1380
cctcatcttc	tttttaatat	tgaagcccg	caggaagcaa	gcagctggga	gaccagagaa	1440
aatggatgat	gaagacccca	ttatgggtac	catcacctcg	ggttccagga	agaagccctg	1500
gccagacagc	cccggagatc	aagcatctcc	tcctggggat	gccccctcct	tggagaagaa	1560
aaaggagctc	cattatgcct	cccttagttt	ttctgagatg	aagtcgagg	agcctaagga	1620
ccaggaggcc	ccaagcacca	cggagtactc	ggagatcaag	acaagcaagt	gaggatttgc	1680
ccagagttca	gtcctgg					1697

<210> 583

<211> 4163

<212> DNA

<213> Homo sapiens

<400> 583

tttcgtacag	gactggaggg	cttgaggaat	gtgggtggcc	ctctcttcgt	tgtttctgcc	60
ccctgaggtt	gtgctttctc	agggatatgc	actctgcact	tccattcctg	cagtgaatt	120
aactcgagct	tggcagctcg	agaggagaat	gtggccactt	tccgaggctc	agagtatctg	180
tgctacgacc	tgtctcagaa	cccgatccag	agcagcagtg	atgaaatcac	cctctccttt	240
aagacctggc	agcgtaacgg	cctcatcctg	cacacgggca	agtcggctga	ctatgtcaac	300
ctggctctga	aggatgggtg	ggtctccttg	gtcattaacc	tggggtccgg	ggcctttgag	360
gccattgtgg	agccagtga	tggaaaattc	aacgacaacg	cctggcatga	tgtcaaagtg	420
acacgcaacc	tccggcaggt	gacaatctct	gtggatggca	ttcttaccac	gacgggctac	480
actcaagagg	actataccat	gctgggctcg	gacgacttct	tctatgtagg	aggaagccca	540
agtaccgctg	acttgccctg	ctcccctgtc	agcaacaact	tcatgggctg	ccttaaagag	600
gttgtttata	agaataatga	catccgtctg	gagctgtctc	gcctggcccg	gattgcggac	660
accaagatga	aaatctatgg	cgaagtgtg	tttaagtgtg	agaatgtggc	cacactggac	720
cccatcaact	ttgagacccc	agaggcttac	atcagcttgc	ccaagtggaa	cactaaacgt	780
atgggatcca	tctcctttga	cttcgcgacc	acagagccca	atggcctgat	cctcttcact	840
catggaaaag	cccaagagag	gaaggatgct	cggagccaga	agaatacaaa	agtagacttc	900
tttgccgtgg	aactcctcga	tggcaacctg	tacttgctgc	ttgacatggg	ctctggcacc	960
atcaaagtga	aagccactca	gaagaaagcc	aatgatgggg	aatggtacca	tgtggacatt	1020
cagcgagatg	gcagatcagg	tactatatca	gtgaacagca	ggcgcacgcc	attcaccgcc	1080
agtggggaga	gcgagatcct	ggacctggaa	ggagacatgt	acctgggagg	gctgcccggag	1140
aaccgtgctg	gccttattct	cccacccgag	ctgtggactg	ccatgctcaa	ctatggctac	1200
gtgggctgca	tccgcgacct	attcattgat	ggcgcgagca	agaacattcg	acagctggca	1260
gagatgcaga	atgctgcggg	tgtcaagtcc	tctgtttcac	ggatgagtgc	caagcagtg	1320
gacagctacc	cctgcaagaa	taatgctgtg	tgaaggacg	gctggaaccg	cttcactctg	1380
gacctgcacc	gcaccggata	ctggggaaga	acctgcgaaa	gggaggcatc	catcctgagc	1440
tatgatggta	gcattgtacat	gaagatcatc	atgcccatgg	tcatgcatac	tgaggcagag	1500
gatgtgtcct	tccgtttcat	gtcccagcga	gcttatgggc	tgctggtggc	tacgacctcc	1560
agggactctg	ccgacacctt	gcgtctggag	ctggatgggg	ggcgtgtcaa	gctcatgggt	1620
aacttagact	gtatcaggat	aaactgtaac	tccagcaaa	gaccagagac	cttgtatgca	1680
gggcagaagc	tcaatgacaa	cgagtggcac	accgttcggg	tgggtcggag	aggaaaaagc	1740
cttaagttaa	ccgtggatga	tgatgtggct	gagggtaaca	tgggtgggaga	ccataccgt	1800
ttggagtccc	acaacattga	aacgggaatc	atgactgaga	aacgctacat	ctccgttgct	1860
ccctccagct	ttattggcca	tctgcagagc	ctcatgttta	atggccttct	ctacattgac	1920
ttgtgcaaaa	atggtgacat	tgattattgt	gaagtgaag	gctcgttttg	gactgaggaa	1980
catcatcgct	gacctgtca	cctttaagac	caagagcagc	tacctgagcc	ttgccactct	2040
tcaggcttac	acctccatgc	acctcttctt	ccagtccaag	accacctcac	cagatggctt	2100
cattctcttc	aatagtgtg	atggcaatga	cttcattgca	gtcgagcttg	tcaaggggta	2160
tatacatcag	gtttttgacc	tcggaacagg	tcccaatgtg	atcaaaggca	acagtgaccg	2220
ccccctgaat	gacaaccagt	ggcacaatgt	cgtcatcact	cgggacaata	gtaacactca	2280
tagcctgaaa	gtggacacca	aagtggtcac	tcaggttatc	aatggtgcca	aaaatctgga	2340
tttgaaaggt	gatctctata	tggctgggtct	ggcccaaggc	atgtacagca	acctcccaaa	2400
gctcgtggcc	tctcgagatg	gctttcaggg	ctgtctagca	tcaggggact	tgaatggacg	2460
cctgcacgac	ctcatcaatg	atgctcttca	tcggagcggg	cagatcgagc	gtggctgtga	2520
aggaccaggt	accacctgcc	aggaagattc	atgtgccaac	caggggggtct	gcatgcaaca	2580
atgggagggc	ttcacctgtg	attgttctat	gacctcttat	tctggaaacc	agtgcaatga	2640
tcttggcgct	acgtacatct	ttgggaaaag	tgggtgggctt	atcctctaca	cctggccagc	2700
caatgacagg	cccagcacgc	ggtctgaccg	ccttgccgtg	ggcttcagca	ccactgtgaa	2760
ggatggcatc	ttggctccga	tcgacagtgc	tccaggactt	ggtgacttcc	tccagcttca	2820
catagaacag	gggaaaattg	gagttgtctt	caacattggc	acagttgaca	tctccatcaa	2880
agaggagaga	accctctgta	atgacggcaa	ataccatgtg	gtacgcttca	ccaggaacgg	2940
cggcaacgcc	accctgcagg	tggacaactg	gccagtgaat	gaacattatc	ctacaggccg	3000
gcagttaacc	atcttcaaca	ctcaggcgca	aatagccatt	ggtggaaagg	acaaaggacg	3060
cctcttccaa	ggccaactct	ctgggctcta	ttatgatggg	ttgaaagtac	tgaacatggc	3120
ggctgagaac	aaccccaata	ttaaaatcaa	tggaaagtgt	cggctggttg	gagaagtccc	3180
atcaattttg	ggaacaacac	agacgacctc	catgccacca	gaaatgtcta	ctactgtcat	3240
ggaaccact	actacaatgg	cgactaccac	aacccgtaag	aatcgctcta	cagccagcat	3300
tcagcccaaca	tcagatgac	ttgtttcatc	tgctgaatgt	tcaagtgtg	atgaagactt	3360
tgttgaaatg	gagccagta	cagcaaacc	cacggagccg	ggaatcagac	gggttccggg	3420
ggcctcagag	gtgatccggg	agtgcagcag	cacaacaggg	atggctcgctg	gcattgtggc	3480
tgtctgcggc	ctctgcatct	tgatcctcct	gtacgccatg	tacaagtaca	ggaacagggg	3540
cgaggggtcc	tatcaagtgg	acgagacggc	gaactacatc	agcaactccg	cccagagcaa	3600
cggcacgctc	atgaaggaga	agcagcagag	ctcgaagagc	ggccacaaga	aacagaaaaa	3660
caaggacagg	gagtattacg	tgtaaacatg	cgaacactgc	tcacacgcca	gttttcacag	3720
ttattttctat	ccacgcctat	gaatctttgg	acggtgagat	ctcacagatg	tcagaactgc	3780
tggaaactatg	aaatggggta	tataaccacg	actctggtgg	ggaaaaccgt	tttttaaagg	3840

acacacacac	acacagcgat	gcattctctct	cctaaagctc	agccacggct	gcggcaaggt	3900
tccagcggtc	gtcgggagac	agaaaaggtt	tgtgcctgc	tgtatcataa	agcacacact	3960
tagcgctctg	gagccggacg	gtggctccac	cattccgca	ggcctggaaa	cttccttctc	4020
cggaggacct	tttactaaaa	ggtagaagac	ttcatggctt	acttggtcca	taactccaag	4080
tgagtctgta	atgtttgtga	agcttgactg	taaccatgtt	ttttctgttt	aattatgtaa	4140
aaaacaaaac	tacaaaaaaa	aaa				4163

<210> 584

<211> 4163

<212> DNA

<213> Homo sapiens

<400> 584

tttcgtacag	gactggaggg	cttgaggaat	gtgggtggtc	ctctcttcgt	tgtttctgcc	60
ccctgaggtt	gtgctttctc	agggatatgc	actctgcact	tccattctctg	cagtgaatt	120
aactcgagct	tggcagctcg	agaggagaat	gtggccactt	tccgaggctc	agagtatctg	180
tgctacgacc	tgtctcagaa	cccgatccag	agcagcagtg	atgaaatcac	cctctccttt	240
aagacctggc	agcgtaacgg	cctcatcctg	cacacgggca	agtcggctga	ctatgtcaac	300
ctggctctga	aggatggtgc	ggctctcctg	gtcattaacc	tggggtccgg	ggcctttgag	360
gccattgtgg	agccagtga	tgaaaaattc	aacgacaacg	cctggcatga	tgtcaaagtg	420
acacgcaacc	tccggcaggt	gacaatctct	gtggatggca	ttcttaccac	gacgggctac	480
actcaagagg	actataccat	gctgggctcg	gacgacttct	tctatgtagg	aggaagccca	540
agtaccgctg	acttgcttgg	ctcccctgtc	agcaacaact	tcatgggctg	ccttaaagag	600
gttgtttata	agaataatga	catccgtctg	gagctgtctc	gcttgcccg	gattgaggac	660
accaagatga	aaatctatgg	cgaagtgtgt	tttaagtgtg	agaatgtggc	cacactggac	720
cccatcaact	ttgagacccc	agaggcttac	atcagcttgc	ccaagtggaa	cactaaacgt	780
atgggatcca	tctcctttga	cttccgcacc	acagagccca	atggcctgat	cctcttcact	840
catggaaaag	cccaagagag	gaaggatgct	cggagccaga	agaatacaaa	agtagacttc	900
tttgccgtgg	aactcctcga	tggcaacctg	tacttgctgc	ttgacatggg	ctctggcacc	960
atcaaagtga	aagccactca	gaagaaagcc	aatgatgggg	aatggtacca	tgtggacatt	1020
cagcgagatg	gcagatcagg	tactatatca	gtgaacagca	ggcgacggcc	attcaccgcc	1080
agtggggaga	gcgagatcct	ggacctggaa	ggagacatgt	acctgggagg	gctgcccggag	1140
aacogtgctg	gccttattct	ccccaccgag	ctgtggactg	ccatgctcaa	ctatggctac	1200
gtgggctgca	tccgcgacct	attcattgat	gggcgcagca	agaacattcg	acagctggca	1260
gagatgcaga	atgctgcggg	tgtcaagtcc	tcctgttcac	ggatgagtgc	caagcagtgt	1320
gacagctacc	cctgcaagaa	taatgctgtg	tgcaaggacg	gctggaaccg	cttcactctg	1380
gactgcaccg	gcaccggata	ctggggaaga	acctgcgaaa	gggaggcatc	catcctgagc	1440
tatgatggta	gcattgtacat	gaagatcatc	atgcccatgg	tcatgcatac	tgaggcagag	1500
gatgtgtcct	tccgcttcat	gtcccagcga	gcttatgggc	tgctggtggc	tacgacctcc	1560
agggactctg	ccgacaccct	gcgtctggag	ctggatgggg	ggcgtgtcaa	gctcatgggt	1620
aacttagact	gtatcaggat	aaactgtaac	tccagcaaa	gaccagagac	cttgtatgca	1680
gggcagaagc	tcaatgacaa	cgagtggcac	accgttcggg	tggtgaggag	aggaaaaagc	1740
cttaagttaa	ccgtggatga	tgatgtggct	gagggtacaa	tggtgggaga	ccataccctg	1800
ttggagttcc	acaacattga	aacgggaatc	atgactgaga	aacgctacat	ctccgttgtc	1860
ccctccagct	ttattggcca	tctgcagagc	ctcatgttta	atggccttct	ctacattgac	1920
ttgtgcaaaa	atggtgacat	tgattattgt	gaagctgaag	gctcgttttg	gactgaggaa	1980
catcatcgct	gacctgttca	cctttaagac	caagagcagc	tacctgagcc	ttgccactct	2040
tcaggcttac	acctccatgc	acctcttctt	ccagttcaag	accacctcac	cagatggctt	2100
cattctcttc	aatagtgggtg	atggcaatga	cttcattgca	gtcagacttg	tcaaggggta	2160
tatacactac	gtttttgacc	tcggaaaacgg	tcccaatgtg	atcaaaggca	acagtgaccg	2220
ccccctgaat	gacaaaccagt	ggcacaatgt	cgatcatcact	cgggacaata	gtaaacactca	2280
tagcctgaaa	gtggacacca	aagtgttcac	tcagggttatc	aatggtgcca	aaaaatctgga	2340
tttgaaggt	gatctctata	tggtctgtct	ggcccaaggc	atgtacagca	acctcccaaa	2400
gctcgtggcc	tctcgagatg	gctttcaggg	ctgtctagca	tcaggggact	tgaatggacg	2460
cctgccagac	ctcatcaatg	atgctcttca	tcggagcgga	cagatcgagc	gtggetgtga	2520
aggacctcagt	accacctgcc	aggaagattc	atgtgccaac	cagggggtct	gcatgcaaca	2580
atgggagggc	ttcacctgtg	attgttctat	gacctcttat	tctggaaacc	agtgcaatga	2640
tcctggcgct	acgtacatct	ttgggaaaag	tggtgggctt	atcctctaca	cctggccagc	2700
caatgacagg	ccgacacgc	ggtctgacgc	ccttgccgtg	ggcttcagca	ccactgtgaa	2760
ggatggcatc	ttggtccgca	tcgacagtgc	tccaggactt	ggtgacttcc	tccagcttca	2820
catagaacag	gggaaaattg	gagttgtctt	caacattggc	acagttgaca	tctccatcaa	2880

agaggagaga	accctttaa	atgacggcaa	ataccatgtg	gtacgcttca	ccaggaacgg	2940
cggcaacgcc	accctgcagg	tggacaactg	gccagtgaat	gaacattatc	ctacaggccg	3000
gcagttaacc	atcttcaaca	ctcaggcgca	aatagccatt	ggtggaaagg	acaaaggacg	3060
cctcttccaa	ggccaactct	ctgggctcta	ttatgatggt	ttgaaagtac	tgaacatggc	3120
ggctgagaac	aaccccaata	ttaaaatcaa	tggaaagtgt	cggctgggtg	gagaagtccc	3180
atcaattttg	ggaacaacac	agacgacctc	catgccacca	gaaatgtcta	ctactgtcat	3240
ggaaaccact	actacaatgg	cgactaccac	aacccgtaag	aatcgctcta	cagccagcat	3300
tcagccaaca	tcagatgatc	ttgtttcatc	tgctgaatgt	tcaagtgtat	atgaagactt	3360
tggtgaatgt	gagccgagta	cagcaaaccc	cacggagccg	ggaatcagac	gggttccggg	3420
ggcctcagag	gtgatccggg	agtcgagcag	cacaacaggg	atggtcgtcg	gcattgtggc	3480
tgctgccgcc	ctctgcatct	tgatcctcct	gtacgcatg	tacaagtaca	ggaacaggga	3540
caggggggtcc	tatcaagtgg	acgagacgcg	gaactacatc	agcaactccg	cccagagcaa	3600
cggcacgctc	atgaaggaga	agcagcagag	ctcgaagagc	ggccacaaga	aacagaaaaa	3660
caaggacagg	gagtattacg	tgtaaacatg	cgaacactgc	tcacacgcga	gttttcacag	3720
ttatttctat	ccacgcctat	gaatctttgg	acggtgagat	ctcacagatg	tcagaactgc	3780
tggaaactatg	aaatggggta	tataaccacg	actctgggtg	ggaaaaccgt	tttttaaagg	3840
acacacacac	acacagcgat	gcattctctc	cctaaagctc	agccacggct	gcggaagggt	3900
tccagcggtc	gctggggagac	agaaagggtt	tgtgccctgc	tgtatcataa	agcacacact	3960
tagcgtctg	gagccggacg	gtggctccac	cacttccgca	ggcctggaaa	cttccttctc	4020
cggaggacct	tttactaaaa	ggtagaagac	ttcatggcct	acttgttcca	taactccaag	4080
tgagtctgta	atgtttgtga	agcttgactg	taaccatgtt	ttttctgttt	aattatgtaa	4140
aaaacaaaac	tacaaaaaaa	aaa				4163

<210> 585
 <211> 635
 <212> DNA
 <213> Homo sapiens

<400> 585						
ggctgaggcc	cacgttttta	ccccagcttg	aggctgaggt	gggctctgtg	ctcctgggtgc	60
tgccaagccc	ttgcctgcta	tcacagggcc	tgagggtgcag	gcctccctca	gacagtgcag	120
ggttacacat	ggggtccctg	atgccactca	gacccctggc	actccacact	gcccttgggg	180
ctgctctgaa	cttctccttg	ccttggtgag	ggccaacact	gcccagtgca	agtgaggctg	240
gaaggctttg	gggaacctca	agttttcagt	aacctgtgtg	tacccaagg	gaattgtttt	300
gcccacagat	tttagcaggt	tggagctttc	aatctgtcct	gttttggggg	tttgtggctt	360
agatgctggg	atgagagaag	ccacctaaat	ccaaagggaag	gagtttgag	cgtgttgcat	420
cagccagcca	gcagacaccc	agctgtcatt	tgcatctctc	gcaacaaaag	ccttggtccc	480
tcagtactat	gggtgtcacc	tgccctgtgt	ggcccagggc	caggtggaag	ccatccatga	540
ctgagtaaaa	tcagagtagc	atcctgctct	gctctcctgt	ttgcaagggt	aggagtggc	600
tgaaaaccag	ctgaagagtg	gcaagtgtga	atgct			635

<210> 586
 <211> 1802
 <212> DNA
 <213> Homo sapiens

<400> 586						
cccacgcgtc	cgcccacgcg	tccgctgggg	ctgagagtgc	acctgtctca	ggaaccacct	60
gagcccacag	atcctgtggg	cagcggccag	ggcagccatg	gcttgggcaa	gtaggctggg	120
cctgctgctg	gcactgctgc	tgcccgtggg	cggtgcctcc	acgccaggca	ccgtgggtccg	180
actcaacaag	gcagcattga	gctacgtgtc	tgaattggg	aaagccctc	tccagcgggc	240
cctgcaggtc	actgtccctc	atttctgga	ctggagtggg	gaggcgcttc	agcccaccag	300
gatccggatt	ctgaatgtcc	atgtgccccg	cctccacctg	aaattcattg	ctggtttcgg	360
agtgcgcctg	ctggcagcag	ctaattttac	tttcaaggtc	tttcgcccc	cagagcccct	420
ggagctgacg	ctgctgtggg	aactgctggc	tgacacccgc	gtgaccaga	gctccatcag	480
gacccctgtg	gtcagcatct	ctgcctgtct	tttattctcg	ggccacgcca	acgagtttga	540
tggcagtaac	agcacctccc	acgcgtgct	ggctcctggg	cagaagcaca	ttaaagtgtg	600
cttgagtaac	aagctgtgcc	tgagcatctc	caacctgggtg	cagggtgtca	atgtccacct	660

```

gggcacctta attggcctca acccgtggg tcctgagtc cagatccgt attccatggt 720
cagtgtgccc actgtcacca gtgactacat ttccctggaa gtcaatgctg ttctcttcc 780
gctgggcaag cccatcatcc tgccacgga tgccacccct tttgtgttgc caaggcatgt 840
gggtaccgag ggctccatgg ccaccgtggg cctctcccag cagctgtttg actctgcgct 900
cctgctgctg cagaaggccg gtgccctcaa cctggacatc acagggcagc tgaggctcga 960
tgacaacctg ctgaacacct ctgctctggg ccggctcatc ccggagggtg ccgccagtt 1020
tcccgagccc atgcctgtgg tgctcaagg gggctgggt gccacacctg tggccatgct 1080
ccacacaaac aacgccacc tgccgtgca gcccttcgt gaggtcctgg ccacagctc 1140
caactcggct ttccagtcct tcttctccct ggatgtggtg gtgaacttga gactccagct 1200
ctctgtgtcc aagggtgaagc ttccaggggac cacgtctgtg ctgggggatg tccagctcac 1260
ggtggcctcc tccaacgtgg gcttcattga tacagatcag gtgcgcacac tgatgggac 1320
cgtttttgag aagccctctg tggaccatct caatgctctc ttggccatgg gaattgccct 1380
ccctggtgtg gtcaacctcc actatgttgc ccctgagatc tttgtctatg agggctacgt 1440
ggtgatatcc agtggactct tctaccagag ctgaggcaag accactggga ggctgagag 1500
tgggccagct cgtgtctcag gegaatttct catttcaagc cactggggaa actgaggcaa 1560
aaccatactt agtcatacc aacaagctgg actgcttagc tgggctgttt tatcttccct 1620
gagtgcctgg gtctccctcc ctcaacttct cccttccct tctctctctc cttctctctc 1680
ctcttccctc atctccctcc tcttctctct gccccacccc agcgggggagc agactgctcc 1740
tccaggctgt atagacctgc cctcttgcac taaacaactt ctcttgagct gcaaaaaaaa 1800
aa
1802

```

<210> 587

<211> 397

<212> DNA

<213> Homo sapiens

<400> 587

```

ccccagcgtc cgtccacgag ttcccccacg cgtccggttg aactcatgat aggtgcagaa 60
atttcagtaa aaataatgtg acatcggcag agctgtcata gatctgggat atggctggaa 120
ggacatagag taaatgatcg gtctggttca tcgctaaagg agacttagga acctagatga 180
agttggtact tctgagaaaag acatctcttt ctgttttccac tactctattc tcagtatcca 240
gtttctcagta cccagttctc agtacctcta tttgtaatac tctgtatttt agtactttgt 300
tttttagaggc ctgttctgtt aacctctctc ctagtaccgt attttttagta ctgctatact 360
cagttgcctg tctgtagtac cctgtacgt agtactc 397

```

<210> 588

<211> 1830

<212> DNA

<213> Homo sapiens

<400> 588

```

agtggcattc agcattattg cccgagctcc acccaacttc agatcagcct gggcatcaga 60
ttcccatagg agcgtgaacc ctactgtgag ctgcgcactt ggatctggat tgctgtctgg 120
tgagaatcta atgcctgatg aactgagggt gaatagtttc atcccgaac cttctctccc 180
aacacggaaa aactgtcctc cgtgaaacct gtcccaggcg ccaaaaaggt taggtacttg 240
ctgtaggggc acctgatctt ttctccagct tctgtgaggt tggctggcag tccctgaaga 300
ctcctgcctg aggcctctgc ctgaacctg tccctcaggg gccagaagca aactccagcc 360
ctccccgtgt ctactgctcg ctgaggaagc cgcagggtgca cactggatcc acaaggcaca 420
gaaccatctt ggccctcggc aagcccccg cttccgccagg gcagacggcc tcaggagtg 480
gcagccggag tctgaactgt cctgggggac caagcaggag ctttaagatg gcaagacctg 540
gggccctggg cagacgcac aaagcaggca gaagcaggca tggccagcag gaagaccaag 600
aagaagggaag ggggtgcctc ccgggcccag agagcctcat ccaatgtctt ctccaacttt 660
gagcagactc agatccagga gtccaaggag gcattcacac tcatggatca gaaccgagat 720
ggcttcattg acaaggagga cctgaaggac acctatgcct ccctgggcaa gacccaaacg 780
tcaaggacgg acgaactggg acgccatgct caaaaggagc ctgggggccc atcaactttc 840
accatgtttc tgaacctgtt tggggcagaa gctgagcggg accgacggcg aggagaccat 900
tcttaacgcc ttcaagaatg ctggaccggg acgggaaagg gaaaatcaac aaggagtaca 960
tcaagcgtct gctgatgtcc caggctgaca agatgacggc ggaagagggtg gaccagatgt 1020

```

tccagttcgc	ctccatcgat	gtggcgggca	acctggacta	caaggcgctc	agctacgtga	1080
tcacccacgg	ggtaggagaa	ggaggagtga	gacccagccg	ggtcaataaa	cctggacgct	1140
tggaccctgc	ctgcgagtct	gccccggcgg	gaagggcgcg	tcggtggctg	ctgggccttg	1200
cgcacgggga	gtcgctcggg	ggcaggctgg	gtggggactc	ccgtggccct	cctgggggtcc	1260
tctaagcgag	gccccccctt	cgccgtgcaa	ctccggaatt	cgccgtgctg	ggccccagga	1320
ccccagccct	ttccttgctt	ccccctcggg	ccacacccgg	ccctgagtct	gcgacccac	1380
ggcggttacg	gtggaggggg	gctccccaga	ctcggcctgc	aggcgccggg	atgggggtgtg	1440
gaagaagacc	gccaggatgc	agctgaagaa	ggtgcacagg	ccggccatca	gcagcagaga	1500
cactgtccag	tcaagtggat	cctccccctg	ctggcagggtg	gacaaggacg	gctccgagcg	1560
tcgcacagtc	agtgccgtca	ttgccagcat	gatgagtatt	ccctcggcct	gccccagcac	1620
aaagatcatg	cctgtggcag	ccccctcccc	cacggggaag	gaacactcga	ccgccaactc	1680
catggccacg	gggcccaccg	agaagccaaa	cagcccagagc	agcgagcagg	tggcagccag	1740
ggcaagggtc	tgtccctgca	gctgggacac	caggggcaaag	ggcacgcagg	ccagagagaa	1800
caggcacagg	ccaatcttgg	tggcctcagt				1830

<210> 589

<211> 876

<212> DNA

<213> Homo sapiens

<400> 589

cacttttctgc	gtcgacacac	gcgcgcgcga	gcagtagcct	atctgtagac	agttctcatg	60
aacagctggc	aggccatctt	ctttgaacag	atgcgtgtgg	ctgccctgtg	ggatgattac	120
agcactatgg	aactaatatt	ctttgaatga	tgcgctctta	ttatttgaaa	aatcaggagg	180
cctggctcttc	aggattcccc	tcctcttcca	ctccccatcc	tccttgagag	cagtatatatac	240
tgggaatgcc	tgtcaggcga	ccttccactt	acagcccatg	gcagctgata	gcattttctag	300
tcgatttttg	tccagaattg	aggcacatat	aagtggggca	ggaccttgaa	gaatgatata	360
attagttagt	cgagtgtttt	atgttgttag	ctaagcgcta	tgctaagtat	ttcattttatt	420
ttatcttctt	taatcctgtt	ttaatcccca	ttctacaaag	aaggatcctg	agacttgggtg	480
agatccatat	tgttggccag	tgcagagctg	ggtccctcca	gtctctgcct	ttacctgcca	540
acctgcatag	catcctggat	attcttgcac	agccacatag	acatttgttt	gtacttttag	600
tatgtgtttg	gtacagtgca	tgttttttagc	tattttctca	agcatctggg	aagttctaac	660
tctgttttat	tgatgaggaa	actgggtctt	gaaatccagg	cctataacctg	tctgagtgtg	720
acgcccagca	agaaagtggg	acatttgaaa	gagcacaagg	agggaaaacc	taataacctcg	780
gattggaaac	tggctttacc	gtgaaccaac	ccttgggttt	ttgggcacgc	ggcttcaacc	840
ctgttggggc	ttaaccttct	ttatcaagaa	agaaac			876

<210> 590

<211> 2295

<212> DNA

<213> Homo sapiens

<400> 590

ttcaatttgg	aagtctcaga	atthtttaaaa	gatgtgttac	taaagctact	tataagtcac	60
ctaaaatcct	accaccttag	gcaacctttt	aaatttttgc	ttatttcata	taatatatat	120
ttatacatag	ttgttataga	gtaagttcct	atthattctg	tattttcaca	tgacgtataa	180
tttcataatt	tccccataat	ttatttagact	gctttctaca	tatctaatag	acactccttt	240
aattttggac	atthttaagtt	ttaaggcttt	tttctactc	cacgatgaat	gaatgtacca	300
atthcattct	ggcattgccca	acattacttg	gtggtagggg	tttttcccct	ttctgctacc	360
ttagcaagta	taaaagggtta	ctthtaattta	catttctttg	gttatatcaa	gggtggggaa	420
ttacttatga	aagtttaatt	ttaaagcaga	taatatthca	aatattttct	ttgaaataga	480
ccatttgtcc	tgccttgaag	tatgtttagta	catttttaaga	aagtcagtg	gttaaggagt	540
cagtgtgtgt	agtattcatg	cttaaaaacac	ttcccttcta	cctaccctaa	taaatgaggg	600
gctcaagaga	aatatttcta	attctctagc	gacatggcta	atthtttttg	gcataaaaaa	660
tatagtctga	atattaagca	ttgattttagt	acccatggta	tcgcagatat	tatacagaac	720
acaaggcaaa	tgataatcag	gtgtaagcat	aaaagcattc	tcacgttacc	ccgatatttt	780
ataaagcaaa	gctattgtat	acccttttac	ttaggaaatt	gaagctcaag	aaggtgaaga	840
tgataccttt	ctaacagccc	aagatggtga	ggaagaagaa	aatgagaaa	aaggagacct	900

agctgaggct	gatcacacag	ctcatgaaga	gatggaagct	catacgactg	tgaaagaagc	960
tgaggatgac	aacatctcgg	tcacaatcca	ggctgaagat	gccatcactc	tggtattttga	1020
tggtgatgac	ctcctagaaa	caggtaaaaa	tgtgaaaatt	acagattctg	aagcaagtaa	1080
gccaaaagat	ggggcaggacg	ccattgcaca	gagcccggag	aaggaaagca	aggattatga	1140
gatgaatgcg	aaccataaag	atggtaaaga	ggaagactgc	gtgaagggtg	accctgtcga	1200
gaaggaagcc	agagaaagtt	ctaagaaagc	agaatctgga	gacaaaagaa	aggatacttt	1260
gaagaaagg	ccctcgtcta	ctggggcctc	tggtcaagca	aagagctctt	caaaggaatc	1320
taaagacagc	aagacatcat	ctaaagatga	caaaggaagt	acaagtagta	ctagtggtag	1380
cagtgaagc	tcaactaaaa	atatctgggt	tagtggactt	tcatctaata	ccaaagctgc	1440
tgatttgaa	aacctctttg	gcaaatatgg	aaaggttctg	agtgcaaaag	gtagttacaa	1500
atgctcgaag	tcttggggca	aaatgctatg	gcattgtaac	tatgtcttca	agcacagagg	1560
tgtccagggtg	tattgcacat	cttcacgca	ctgagctgca	tgacacagctg	atttctgttg	1620
aaaaagtaag	cttcctaac	tgtttatcaa	agcaagtcta	atttgatggc	tagttctcaa	1680
ctcatagctg	ttaacagtag	cagggagtag	aatttgcagt	gatttttaat	ttttatgtat	1740
ttgtagtttt	tactctcctt	atatttttcc	tatcgtttcc	aaattttctg	ccattagcac	1800
acttcttata	atcacaaaaa	tgtaacata	tgtacaaatt	gtttttctgg	ttcgaacctt	1860
tcaggtaaaa	ggtgatccct	ctaagaaaga	aatgaagaaa	agaaaatgat	gaaaagagta	1920
gttcaagaag	ttctggagat	aaaaaaaaa	cgagtgatag	aagtagcaag	taaggattta	1980
tttttattta	tttattttga	taagcagata	gacttttttg	gtacattatg	aagtactcat	2040
tctgtttttt	tgtctggggc	ggtatggtca	ggacacaagc	ctctgtcaaa	aaaagaagag	2100
aaaagatcgt	gttgaaatc	tgaaaaaaa	gaaagcaagg	atactaagaa	aatagaaggt	2160
aaagatgaga	agaatgataa	tggagcaagt	ggccaaacat	cagaatcgat	taaaaaaagt	2220
gaagaaaaga	agcgaataag	tatgctatac	atcttttcaa	tccctttcta	atgcattcta	2280
ctacttaatt	tttac					2295

<210> 591

<211> 869

<212> DNA

<213> Homo sapiens

<400> 591

atgcctgtcc	agacttttgc	aataggagca	cctttaagct	ggcatgtggt	tgtaacagcc	60
taaccctgtct	tttttagagt	gataggccat	gctaattctta	ctctctgtctc	cagccttgaa	120
actggccatt	ttttcaagga	gccagggttc	ttttctcttg	ggaacagtta	ccagcatctg	180
agtatgtca	tcggttcggg	gtatctctgc	ttctgtgccc	ttcagtggac	tgagctagga	240
aatgtatgtg	tgtgtgcaca	catatgccgt	tgacacacaca	tgacaggtttc	agggatcaca	300
agtcgggtcc	atgtccacat	ccatagggtt	ctttcttgcc	ttatccattt	cacctcttag	360
agcagaggac	tttcaccatt	tctattgaac	atgagtataa	tatgtagtcc	ttacctaaga	420
ggattctgtg	gatcttctct	ggggttctca	ggggccatgg	aacatgtcag	agcaaatggt	480
ggaatggatt	accagaatg	tgagtgtgt	gagtggggca	ctgttggaat	cagtcaccaac	540
ccctaaccgc	gagtttgc	gaaaaattca	tatcttactt	agggccatcc	taactttctt	600
gcttcccaa	gggagggtag	atcaaaacat	aggggaaagg	aggggtcata	aacttgtttg	660
aaggtagccg	aggaacccc	agactttata	ggtggtctaa	tctaaggccg	ggtgagtcga	720
gcacatatat	gaagccttca	acatagggaa	aaaggtgcag	gactctctta	cacatgacta	780
gtaaaacggc	gttagctatc	atggtacctt	ccaacgacca	gccaccatcc	cgtcttgtac	840
tactgaagcc	tcttcctcta	gaaaacacg				869

<210> 592

<211> 862

<212> DNA

<213> Homo sapiens

<400> 592

catggtaggc	actcagtgga	taccagtggg	ggaaggtgga	ggcaaagagc	ccttttataa	60
aacaacaagg	ttaggaaactc	ctctggcagg	agccaagttc	ctccgagttt	agatcacttc	120
acataatgtg	cccttgctaa	tgcatttgct	ggtttctcac	gccttctctg	cttttctctt	180
ccatggttac	tctgggaggc	agagaggtgc	taagcaatgg	aggtgtcatc	cggcccgccg	240
atctagggaa	cgtccttcag	aggacaactt	gtcaccagcc	gtcaaagaag	agagtggctt	300

tgtgtgtctct	gaacatctgg	cagcgtctga	caggaagctg	aggggggtgc	attaattgtg	360
atgaaataat	ttaaaccatc	aggaataaat	gaggctgtta	agctaagttc	agattccatt	420
tgccatgcac	atgtgtctag	cagcctgtgt	gcagttaaaa	gaaattgaat	tatattagct	480
catgagtaga	agtgaaacag	atactgtaaa	tgaacaagt	tgctgtatag	cgatgacatc	540
gtgttgaaac	atttcacaga	gttacagttt	gtatgacac	tgatcaaaa	gtggtatatt	600
atttaatgaa	tttttatatt	ataaaacatt	cctacgggat	ggagtatagt	aaggaccagt	660
ggtttatggg	taggtagaga	ggatgtgagc	tggatgggca	gaacaaaaca	atccacaggt	720
tacgggcctt	gaagggagtg	ggagggaaat	cacgcgtcat	tggagcccag	ttgccctgtt	780
agagcccgaa	cggagtcac	atcacgccgc	ctgcacttgg	gcatacgca	tcacgggaac	840
gctccagtgg	atccagatcg	ac				862

<210> 593

<211> 1400

<212> DNA

<213> Homo sapiens

<400> 593

gtgtgaggcc	atcacggaag	atgtgtctgc	ttctgtctgt	tctggggcta	gcaggctccg	60
ggcttggtgc	tgctgtctct	caacatccga	gctgggttat	ctgtaagagt	ggaacctctg	120
tgaagatcga	gtgccgttcc	ctggactttc	aggccacaac	tatgttttgg	tatcgtcagt	180
tcccgaaca	gagttcatg	ctgatggcaa	cttccaatga	gggctccaag	gccacatacg	240
agcaaggcgt	cgagaaggac	aagtctctca	tcaacctgc	aagcctgacc	ttgtccactc	300
tgacagtgc	cagtgcctcat	cctgaagaca	gcagcttcta	catctgcagt	gctggagcgg	360
atagcggcac	ccaagagacc	cagtacttcg	ggccaggcac	gcggctcacg	gtgctcgagg	420
acctgaaaaa	cgtgttccca	cccagggtcg	ctgtgtttga	gccatcagaa	gcagagatct	480
cccacacca	aaaggccaca	ctggtgtgcc	tggccacagg	cttctacccc	gaccacgtgg	540
agctgagctg	gtgggtgaat	gggaaggagg	tgcacagtgg	ggtcagcaca	gacccgcagc	600
ccctcaagga	gcagcccggc	ctcaatgact	ccagatactg	cctgagcagc	cgccctgagg	660
tctcggccac	cttctggcag	aacccccgca	accacttccg	ctgtcaagtc	cagttctacg	720
ggctctcggg	gaatgacgag	tggaccaggg	atagggccaa	acctgtcacc	cagatcgtca	780
gcgcgagggc	ctggggtaga	gcagactgtg	gcttcacctc	cgagtcttac	cagcaagggg	840
tcctgtctgc	caccatctct	tatgagatct	tgttagggaa	ggccaccttg	tatgccgtgc	900
tggtcagtgc	cctcgtgtcg	atggccatgg	tcaagagaaa	ggattccaga	ggctagctcc	960
aaaaccatcc	caggtcatte	ttcatctctca	cccaggattc	tcctgtacct	gctcccaatc	1020
tgtgttccta	aaagtgtatc	tactctctct	tctcatctcc	tacttacatg	aatacttctc	1080
tctttttctc	gtttccctga	agattgagct	cccaaccccc	aagtacgaaa	taggctaaac	1140
caataaaaaa	ttgtgtgttg	ggcctgggtg	catttcagga	gtgtctgttg	agttctgtct	1200
atcactgacc	tatctcttga	tttagggaaa	gcagcattcc	cttgacatc	tgaagtgaca	1260
gccctcttct	ttccaccaca	atgctgtctt	ctcctgttca	tcctgatgga	agtcctcaa	1320
caccatttcc	ataccagggc	attctgggtc	cccactggag	ggtagtctg	aagggcaatg	1380
gctgggcttt	ggaaaaccag					1400

<210> 594

<211> 380

<212> DNA

<213> Homo sapiens

<400> 594

gggagttgaa	ggccactttc	ttggttggtc	ctaagtgggt	gagagttcac	aaacaccact	60
ccctccctga	ggactaacag	ccattgacta	ctggtctgct	tgtaactga	ctctccagag	120
ctccccatga	gctatgagtg	tgggacttca	cctgggattt	cttgcttggt	ttcttccctt	180
tcataattccc	acttctcccc	ttcccttact	atttcaactg	ggagcacttc	ctaataaatc	240
acttgcaact	tatgcttggc	tcagggattg	cttctgggag	aacataacct	aaaatgtcca	300
acaataagga	acagttaatg	acatccatcc	aacacaatat	cctttggctg	ttaagaacct	360
atctctgaag	aaaacttaac					380

<210> 595
 <211> 748
 <212> DNA
 <213> Homo sapiens

<400> 595
 tagtctatct gcagagctac ctctacattt taacttaggt tagttgtttc ccttggaatg 60
 tcttctccgt gttttcaatg ttttcaccta tgtgttacca ttaaggctctg gcccctgtgc 120
 caccacctac agaaagcctt tcctgatttc tctattcatg tcttctctga aagtgatctt 180
 tcttctttct gtgaagtcca acttttataa atatgtttac aaaaatactt cttaggatca 240
 ttaatgcatt gttcctaagt cagagttctc tgtgaattta ttctatacaa tcttctagt 300
 ctagtatata aactccttaa gaacaagaat ttgctcatga tagtagtccc ctgcagtgtg 360
 tagattacat aagtgttgag taaatcttgg agatcaggta tcttcattca agaggaaaat 420
 gaataagaga tccagttcag agacctacag tgagtgtctc ccgctgcagg cagggattga 480
 tgagctgctt caactcttac caccaccac tctcaatcct atactctaac taatgaactc 540
 tgctcaccgt tgtccaagtg agttgaccct ttggcctttc catgccgtgg cctgtgcacc 600
 ttctgaact tggaaatgcct ttactctttg aaaaaataa gcctctgggc aaaaataggc 660
 ctttgtcctt tgggggttcc tgggggttgg aaaaaatgg ttctcttttt tttcccggg 720
 gccggagaaa aacccaact aagggttc 748

<210> 596
 <211> 356
 <212> DNA
 <213> Homo sapiens

<400> 596
 tctttttttt atttttgctt atttatttct attctttgtt gatatggaaa aatattttca 60
 cacagttatg atcaagttgt gccatcaact ttataacgta tatgtgtgct ttttccattt 120
 aattgttttg ggagatattg ctatagacta cattattgtt cccaatattt cctacctctc 180
 tatatctata ccctttgtag ttactaacat tagaggtaga gatattttcc acccctgtaa 240
 tgtggccttg gtcattgtgac ttggaatgtt agtagttctg atgtgcacag aggctgtaca 300
 tggactttca gcattgggtt tactctctcg ggtttctgct gtttccatac aaagaa 356

<210> 597
 <211> 564
 <212> DNA
 <213> Homo sapiens

<400> 597
 caatctgaag atatggttg aatatttgc tactccctga atatttgata tagttcatgt 60
 ttttaggtgt gataacatat ggctatgttt tttaaaagac atatttataa gacataccta 120
 tccatactga cataaatatg gctgaaaaga tatgcttgtg tgatgtaatt taaataattt 180
 ggagggagga tcaggagtta atgttgaaac tcaattggct ttgagttggg tataatcaag 240
 catgtgagca tttcttatac tggaaacctt acttttgcag atgtttgtaa tgttttatga 300
 aaataaaaaga agagaatacc tccaagacat gctgctttct tatagattat tagttgcaat 360
 cttagttttg ctgaagaaat taacagaact taatacaatt actcttattt gcaagtctat 420
 aattttctaa acctaacctt gatgcagtc tactcctaatt atttacaagg cctagaacaa 480
 gagtataata atggcagccc acattctacg ggtctaaata tatacaagtt ataaaccaag 540
 tcagcaaaat aaaatgccat gtat 564

<210> 598
 <211> 376
 <212> DNA
 <213> Homo sapiens

<400> 598
 atggccttatt taaaaagtag aatgtttatg tatttaaaca gataaaattt agaatgattt 60
 taattccagg gtaaaatctg ctccgaccag agagaaaaaa ctaattcata tatgaatata 120
 gtatttgtaa tctcttgggt taaagacatg caagtcttag aagtatttgt actgcttaat 180
 gttttaacaa ctctaacaat aatagcagcg gccatacttt gtaccagttt ttgctgtaag 240
 ccttttatat atattaatcc tctttaaaac caccctatca agtacaagat aataatttga 300
 tatgggtgat gaagcaactg atgggaaaaa agagagggtta aataatttgc cccaaatcct 360
 attaagtgat gtagcc 376

<210> 599
 <211> 739
 <212> DNA
 <213> Homo sapiens

<400> 599
 ctggtactag aactcacaga actgccacag aaggetgaac agtcctgggc ttttcacatg 60
 atcaggttcg cacttccatg gttctcccaa atatggcttt ctaaacaac ttggactagg 120
 ctcaactcact tggcatttct cctgcaggaa tgcaactcaa tgttctatcc aaaggtttca 180
 agaacgacag tttttggatg tttatttaat cctctctcaa gccgtggttg ttttgaataa 240
 atggcaaatg tgattagtaa atggaacatt cattttgtta gactgcctct aaactccaga 300
 tataaatggg ctggatttta cagcttattt taacatttcc ttttctctat accctttctc 360
 tgatcagctc ttcaacggtg atataatttc ttttaatgca aatgtacaaa acaatgttag 420
 tcctgacttt tggcaagcag ttcacaagtt tgggtgaaaa gacattgctc ttgaaaaaca 480
 ggtcattttt agatttgcta tggctttcct tctcactagg acatatttgg ctgatgcaga 540
 acaatggagc taaggagggtc tttagcttgg cttgcactca tcagaactca gcagtacttt 600
 tctttttgag gttcaaagggt attggcccaa aatttgggaa atgtggggta aatccactct 660
 acagccccc ccaaaacacc ccctgggttt gggggggggg aaaaaaagg gaatttggcc 720
 gggcgcgggc gttaaaaaa 739

<210> 600
 <211> 379
 <212> DNA
 <213> Homo sapiens

<400> 600
 ctattttgag ttctagatc cagtcttaga tgaccaactt ctttcatctt ttactaccac 60
 ttctaccatc tctcttttcc ccctcctcaa aaacgcatag cttcaatatt cataagatca 120
 tcatcatcat ccttttcttc aacagcattt tcttgatcc tagagattac cttaaaataa 180
 ggaattggct acaaagtaat accttggaaa gagaaataga atggatcacc tctataagggt 240
 gcttatgtaa ctctggaact acgtttatat ttccattaac cacaaagtcc acatgagtca 300
 tacttatttt tctgtctcag gctactaaaa tagaacatgt tctctagagg agaacatcaa 360
 ggagttcttt tatttgtcg 379

<210> 601
 <211> 2038
 <212> DNA
 <213> Homo sapiens

<400> 601
 tttcgtcttg gccgcgcagt gccggaaccc ggctgcagcg gtgggaaggc gggggcgtgc 60
 cggcccagcg gggagaggca tctgcagggg ctgctgagag taaatacttg gcgcctccag 120
 ctgctggcca aggagacaga tggagctcaa gttgggagat acgccctgag agccgatgat 180
 agacacaagt ccagatctcg gattttgata ctgtatgttc cctgggttcc tgagagagga 240
 cattgaggag taggagtcgg cgattaagga gatcgggtaca attgggaagc ctctgtcag 300

agcttccagc	aatttcctca	tcagagggtg	acaagcccta	tgggctaaga	cagaggggtcc	360
tcagaaagga	gtgcggacgc	cgatcatgctg	cagcagctcc	tgatcaccct	gcccaccgag	420
gccagcacct	gggtgaagt	gcgtcatcca	aaggcggcca	cggagcgggt	ggccctgtgg	480
gaggatgtga	ctaagatgtt	taaagcagaa	ggaactgtta	accttcaagg	acgtatctgt	540
ggacttcact	caggaggagt	gggggcagct	ggccctgtct	caccggaatc	tgtaccggga	600
ggtgatgctg	gagaactatg	ggaacctggt	ctcagtggga	tgatcagctt	ccaaacctgg	660
cgtgatttcc	cagttggaga	aaggagaaga	accatggctg	atggagagag	atatttcagg	720
agttccaagt	tcagacttga	agagcaaaac	aaaaaccaaa	gagtcagcct	tacagaatga	780
tatttcgtgg	gaagaactac	atttgtggcct	aatgatggaa	agatttataa	aaggaagcag	840
catgtattcc	accttgggaa	gaatctccaa	atgtaataag	ctagaaagcc	aacaagagaa	900
ccaaagaatg	ggttaagggc	aaatccccct	gatgtgcaag	aaaacattca	ctcaggagag	960
aggccaagag	tctaatagat	ttgagaaaag	aattaatgtg	aagtcagaag	ttatgccagg	1020
accaataggt	cttccaagaa	aaagagatcg	taaatatgac	acacctggaa	agagaagcag	1080
atacaacata	gatttagtta	atcattcaag	gagttataca	aaaatgaaaa	cctttgagtg	1140
taatatttgt	gaaaaaatct	tcaaacagct	tattcacctt	actgaacaca	tgagaattca	1200
taccggggag	aaacctttca	gatgtaagga	atgtggaaaa	gccttttagcc	aaagttcatc	1260
tcttattccg	catcagagaa	ttcatactgg	tgagaaaccc	tatgaatgta	aggagtgtgg	1320
gaaaaccttc	agacatcctt	catcgcttac	tcaacatggt	agaattcata	ccggggaaaa	1380
gccttatgaa	tgtagggtat	gtgagaaagc	cttcagccag	agcattggac	tgatccagca	1440
tttgagaact	catgttagag	agaacctttt	tacatgcaaa	gactgtggaa	aagcgttttt	1500
ccagattaga	caccttaggc	aacatgagat	tattcatact	ggtgtgaaac	cctatatattg	1560
taatgtatgt	agtaaaacct	tcagccatag	tacataccta	actcaacacc	agagaactca	1620
tactggagaa	agaccatata	aatgtaagga	atgtgggaaa	gccttttagcc	agagaataca	1680
tctttctatc	catcagagag	tccatactgg	agtaaaacct	tatgaatgca	gtcattgtgg	1740
gaaagccttt	aggcatgatt	catcctttgc	taaacatcag	agaattcata	ctggagaaaa	1800
accttatgat	gttaatgagt	gtggaaaagc	cttcagctgt	agttcatccc	ttattagaca	1860
ctgcaaaaca	catttaagaa	ataccttcag	caatgttgtg	tgaaatatac	taaacatcaa	1920
agaatttatg	ttggagcaca	agattttaaa	tcagtgtgtc	cctgatccct	caaaaatcca	1980
tttgtttttg	gattttccaaa	aacgaacatt	aaaaaaaaat	ggtttggcaa	aaaaaaaa	2038

<210> 602

<211> 868

<212> DNA

<213> Homo sapiens

<400> 602

agttgttaca	ccatctaccc	taattcctga	attccaaaac	cttggagtct	tctttgattt	60
ctttctcatg	ttctccacgt	tagtagggcc	tgctgctttc	cctcctcagt	gtatgctaaa	120
ctcatttaac	ttctccatt	tttactgaca	atgcacacca	tcatactctg	tcattctatgc	180
cactgtaaaca	cattctttaa	tggtccctct	gttcaactgt	tgccctgca	attcattcta	240
tatgtagtgg	tgaagtga	tacatataaa	cacaaatcaa	gttttgttac	ttgatggaaa	300
ccctccaata	atcattcact	atgaataaaa	tccagacctt	ttgctatgac	cctcaagacc	360
ccatgtgacc	tggtccctgc	ctacctctct	ggccttggtc	ctcacattc	tgtctgtact	420
gatattcacc	agtcattatg	gttgtctctt	ttttcctaaa	ttaagcactc	taaactcatt	480
tctgtctcag	agactgcaga	tgccatgctc	tgtgccggaa	actctctttt	cccttctctg	540
gttagctcct	tcccatcatt	caggtttcag	ttcaaatgag	gcttctctga	ggactgatct	600
attatttggc	acagccattc	tttattctct	atggcatcct	ccatattatt	ttctttataa	660
tacttcttaa	tgtgtgaata	attactgtgt	ggatgacttc	cttacatagt	tatttatttg	720
ttaatgttct	tgcttacatt	tcattgtcag	cttctagaag	aagagctctt	taagagcagt	780
gacctgtct	gtcttgatca	tggaacaaag	actggtatat	ccagatgttc	aataaatatt	840
ttcctgtatg	aatacatgac	tatgtttt				868

<210> 603

<211> 1001

<212> DNA

<213> Homo sapiens

<400> 603

```

ccacgcgcgc cgaccaagtg aacttgtaaa gaacatgtgt tctgcagttt ttaggtgttc 60
tttatatatt aaggggggttg ataatgttgt tcacatcatt tgtgtatggg ctgattttta 120
ttttgtttga tttttatttt ctatcatttg ttgaaaggga tgttaaaatc ttcaactgta 180
atgggtgaaat agtattgttt ccatttaatt ctgttcattt ttgcctgata tgtctttata 240
tacacattta agattatgtc ttctgatga gttgtgaatt ataacattat gaaatgttat 300
tctccggaat attattctct ccttacagtc tattttactc aatattgata tagcaactcc 360
atcctttata tacttactgt ttacatgggtg tgccttttca gaagcattta ctttcaatta 420
tagatagcat atagatgaga cttgtttttt tttaaatcta ttctgaaaat ttctgatttt 480
attattagga atatttaggg gaaatgttta ataaattaat attttgggtt tttttttctg 540
ccatttttca tatttatccc tctctctccc ccatgaaaaa taaaacatct tttcttaaaa 600
ctagtacgaa ggataaaaat acgcttcccc tctctctgtg ggctcctttc tcagctctgt 660
cttctaacaa ctctcaaac ccggtttcat aatttctct agaccttca ctcttatggg 720
ctccaattcc cgacaatagt ctacatccct gccattaccc ttctactgc agcctcactg 780
aagcctacct tcacatcact ttgtctatat cacctgctct aacctacact actatcagtc 840
cagctactct ttcattagat agattcttca taatataccc ctgctaaac ctacacccta 900
gcgccctgac tactctcccc gcacccatc cacactccgc acacatcgtc ccacgactaa 960
tacgcatgac tacctgcata acctcactct ctcttaattt c 1001

```

```

<210> 604
<211> 1301
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1301)
<223> n = a,t,c or g

```

```

<400> 604
cacgagagaa attgttgcca aattgtgaaa tttattgttg tataatgcta atagatcagt 60
tgtcctgatg tctttgctgt aatgatttct ttataaaaat gatcttaaat ctgagctccc 120
taactttagt ttttgcttgg aattacccat tacatttgat gatattctta aatgtcagtt 180
gtagctgtta ctctgatgat ataagtggaa tatacagaag cgtacttaga caaaagttag 240
gttaatatct gaactacttc ctcttgtgt atttaagaga atattgactt aagtttctag 300
aatcctcaac taatcctaag tttattttct ttgtctagaa tactatgctg tttttgtttt 360
tggaagggaag agatataggc atagtttctt gctctcaagg agcttcaaag gctgtaccag 420
tggggatgcc attggtattt ttagctggat agttgttatt cagaaaagca ggacaagtaa 480
ttatgattcc tggtccttac ctggtaatgc cagtaatgtt aactctagct ggggtgtgac 540
atctgggtcat ttacttgcca atctttcttt tttttttttg gcgtttgggg aaagggttta 600
ggacttcaaa gacggcccgg gtaagtcaac gcaggggccg cacaggggtg ggttcgctcc 660
gggggttccc gcgtgagcgg gcacaacacc gatttgtggc gcgacgggga tggacccgcg 720
gcaagggtgag gattgcatcg gggcgccccg gacggggggg cactacaccc tccgctgccg 780
tccaagaccg cgagcatcgc ccgcgggacg aacggagccc gggcgcatgg ggcccccccg 840
ccaggagccg cccaccaca ccggggcgcg acgtctcggc gcgggcgga gcccagcacg 900
ggcagggcga tgtcgttatt cggcgcggtc ccgccccgcg agggcgctgc ctccactccg 960
ggcgaccgca tccgcggcga ctctctcccgc tcgtctcccc tctcgcgtac aacgactcgg 1020
cgacaggccg ggacgcgggc acctgatagt cgcgcacggc gtgcactcgg cgcacaccga 1080
ctccgcgcgg gtggataaag ggaaactcgg ccaacgacct gctgtgcccc gcgggcgcgc 1140
tagagcgcgg tcagggggat caccgtcgcg gcgcgtgcac gtatgagcgg cgcggagacg 1200
cgcgcgcggt tcgcccgcg acccgctcac tacgtgtcgt ggcgagagaa tatnctgca 1260
taggcggcgg ggcgcctacc ccatcgga caactatggc t 1301

```

```

<210> 605
<211> 375
<212> DNA
<213> Homo sapiens

```

```

<400> 605

```

```

ccccgcgctc cgaagaatgg tttccttact aaatgagaaa agttgagccc tttccactaa    60
aatgggttaaa ataaaaaactt catgtgttta attctgggta tctggaaaat tcactatgca    120
gaacttataa tgttaaataa acgagttggt aataaatgta gatcatgtct tatccaaaaa    180
tgccatctta catgtcatag tacagtcatt gttttatatt aatgcagaga ggaagaagct    240
gtgatgttaa taaagttgaa ttttaaaatg aaaatccaaa gaacttatatg tatataggcc    300
aaataaaaag ttacttgatt acttaataat atggattaaa atgagtaatc actgtaattc    360
atatattcaa gaagg                                     375

```

<210> 606
 <211> 398
 <212> DNA
 <213> Homo sapiens

```

<400> 606
cttacatcag tttaaaatga gttaccatga acaatatgaa cttaaagaga cttttactat    60
ttttggctaa aatgttttagc gcaatctttt ccttacctac tcatecttct catttcccca    120
tttccattta tgacaacatt ggtcattggc ctcagtcacc gaaagtcagg aggaaggaag    180
gaaatgaata tttattgaac cccaatatgt gccagaccct ggatttaaca cttttaggga    240
taggagatta tttaacctca ataacctctc cctgagggca ggaagtggat ttatagatgc    300
ggaaacagag gttctgcaaa gtcaattgac tttgcctggg aagaggcaaa accagcatcc    360
tttatttagg caatccaagt gatgttcatt tctctctg                                     398

```

<210> 607
 <211> 1121
 <212> DNA
 <213> Homo sapiens

```

<400> 607
ccccgcgctc cgatttgatg gagaaaagct gctattataa agcctgatgt ggactttttt    60
catcagtgtc actcaagcaa gttggccttt aaagacagtt ttttactgct taatatatag    120
gagttttctt gttttatttg ttcattttcc taattgaaca aattatggct cctcttccta    180
gcctcactct aagacettgg tgtgtctcca tgttactgga cctgtgggct gcatttgga    240
caattactcc ctcttgaag cactttcatc acctgccttc cgggacacag cactccctgg    300
ttttgtcctt gtctctgact ctctattctc agttgtcttt gctgatgggc acctcagctg    360
tctgtctttc tgcctgtttt tcttctctca gcactttccc tgggtgggtg cttatcatct    420
gcacactgat gatttaaaaca tagagttttt gcctgtatct ctccccctaa gtctaggctt    480
atatatctaa ctgcctgtct agtacctcta tttggatggt taataggcat ttcaaattgg    540
aatccaacct tttgttccta cctctgcagc cctgggtcaa aacaccatca tctcttgccc    600
agcttattac acctgtagtt accttgcac tgggctttcc actttcatcc ttgccctcc    660
agtctgttat tatagttggt atagggattg tatcaaaact tgtaactggc tactggttct    720
gatgagtaaa cttaaacctt ctcagggtcc ccataccccc ccagctgggg ccttccctcc    780
ttggcctccc ctgaccactt gtggattggg catctggctg ctcattcagg caaagggtca    840
ttctcagacc tgagggcctc ccctagaggc gacctgctgg tccctcctag agcgttcgca    900
caagccactg gttcttagtt ccatatagta gcctctgggc ctctcaaggg taccocctgt    960
agcatccccc cgatctgacc cctcctcggg atattgccct aaggaacgaa agaagctgct    1020
tgccccaaag gagtgttggc tcgatttggg gggcctgtct tgaatcgctc ccatcttagt    1080
ggaagaatgg acaagtgggt gcaggcgatc gggatggcgg c                                     1121

```

<210> 608
 <211> 774
 <212> DNA
 <213> Homo sapiens

```

<400> 608
cctcccgggt cgaccacgc gtccggttaag catgccccac actaagtata actaatatat    60

```

agtaaaactt	gcaatatagt	tagcataact	agatatattat	ccctgttggg	atttcacagt	120
tgcaccttgc	ctgttattta	tattttccta	aattattaga	agattttaga	aaaagattct	180
gtgttatgaa	tgcccagggtg	agagttaatt	actgtatgca	ttttgacacc	tatgctgtta	240
aaaagctggt	gttgatagct	gaaccaagaa	ttggtctttg	accttctggg	cacagttaat	300
gagctactaa	tctttagagg	catgtttctg	ttggacctct	gcctgggctc	attgtcagta	360
tttattgaca	ctcatccatg	tatgcatgga	gggtttaaat	gcagtcaaga	ctggtgttct	420
ccagccaagc	tgttgctttc	agcattcaca	aaaacaagg	agaaaggaga	cctggacaac	480
aagcacaggc	acttggaact	ttaaaaatta	ttttattttc	tgttttcccc	tgatatgata	540
aatagtgggc	taaagacctc	agatttcctt	tattcatata	tggttttctt	ttttaaaaaat	600
attattttca	gtggatttgc	ttatggacac	atttattacc	aggtttattc	aaaaattaaa	660
catttggtca	gcatttgtgt	cctaagctga	cagtctttaa	atcttatttt	tcacagttat	720
attggaagtt	atattagaag	atgaagcggc	ttcctaagcc	cagtacaaat	ctgc	774

<210> 609

<211> 1145

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1) ... (1145)

<223> n = a,t,c or g

<400> 609

cccacgcgtc	cgccccacgcg	tccgcccacg	cgttcggggg	ttttataaaa	atggattcag	60
ggctctgctga	aataaaat	ttttaaaaat	ttcagtcctat	aaaccaaaca	aaaatatctg	120
tcctggaatg	tgatcaggaa	caaaccagaa	aactgtgaac	atctgatctt	gatactggct	180
tatgttgtct	cttggttaagc	ttttgcttct	ttgcattatt	catgaccatt	caattaattt	240
ttgtatagcc	atacaggtag	gattattacc	aagtgcctac	cgtgtaccag	gaatagtctt	300
aagccttgag	aatacagcac	taataaggca	gactccctgc	tcaaatagag	ccaactaatg	360
aaaaatcgat	aaaatagaga	ctaaagagag	atccttagtt	gcgtttaaaa	tcttagtttt	420
taacttccag	gctggcacag	tttggttaaca	aaaaaaaaaa	aaaggggcgg	ccgttctaaa	480
gaaccaaagt	ttactaacgc	gggcttgcaa	ggtaaaaact	tttttatggg	gccccaaaaa	540
tcaattccag	gggcccgggt	ttaacaaggg	tggaaacgtg	aaaaacannt	ttntttttgc	600
gctttcgctc	gggtgagaact	gatgatttct	cggaaatggat	gacggcgcg	atcgcttacc	660
ggaatgcacg	gttggtattg	atcgatagat	cgtcgggaac	atttactaga	tggattggcg	720
gatactatgc	gatagaccga	tggtagcggg	ctgccgacgt	gtccgctcgg	tgatatcgct	780
gttcgggtttg	gtgtgtctga	ttgttgggat	cggtgccagc	taacgaacgg	gttgacgaaa	840
gagaggacag	cattgtctgg	tctcgatcgt	ctaaccgtcg	ttctggaggg	aaacgaccgg	900
attatagaca	ggcttcgtca	gcgcgggagc	gcatggtggc	ttagggaaaca	ggggacgcgt	960
gagagaggac	gcgtgggtgc	acatacatgt	ttaatatggc	aatgaattat	ccgatctcta	1020
ttagatggca	cacgcgggtc	gattgtaagc	ggacttggct	ggacgctcgt	gatttaatcg	1080
ccatgtgcgg	agtagttcgg	cgataattat	tgtattcatc	acgatgagat	gtgacggcag	1140
aggcg						1145

<210> 610

<211> 1192

<212> DNA

<213> Homo sapiens

<400> 610

cccacgcgtc	cgcttgcct	tectgacceca	ggggctccgc	tggtgcggg	cgctggggag	60
ctgccgccag	ggccaggagg	ggagcggcac	ctggaaagatg	cgccattgg	ctgggtggcct	120
gctcaagggtg	gtgttcgtgg	tcttcgcctc	cttgtgtgcc	tggatttcgg	ggtacctgct	180
cgcagagctc	attccagatg	caccctgtgc	cagtgtctgc	tatagcatcc	gcagcatcgg	240
ggagaggcct	gtctctaaag	ctccagtcctc	caaaaggcaa	aatgtgacc	actggactcc	300
ctgcccctct	gacacctatg	cctacagggt	actcagcgga	ggtggcagaa	gcaagtacgc	360
caaaatctgc	tttgaggata	acctacttat	gggagaacag	ctgggaaatg	ttgccagagg	420

aataaacatt	gccattgtca	actatgtaac	tgggaatgtg	acagcaacac	gatgttttga	480
tatgtatgaa	ggcgataact	ctggaccgat	gacaaagttt	attcagagt	ctgctccaaa	540
atccctgtct	ttcatggtga	cctatgacga	cggaaacaca	agactgaata	acgatgccaa	600
gaatgccata	gaagcacttg	gaagtaaaga	aatcaggaac	atgaaattca	ggtctagctg	660
ggtattttatt	gcagcaaaag	gcttggaact	cccttccgaa	attcagagag	aaaagatcaa	720
ccactctgat	gctaagaaca	acagatatct	tggctggcct	gcagagatcc	agatagaagg	780
ctgcataccc	aaagaacgaa	gctgacactg	cagggctcctg	agtaaatgtg	ttctgtataa	840
acaaatgcag	ctggaatcgc	tcaagaatct	tatttttcta	aatccaacag	cccatatttg	900
atgagtattt	tgggtttgtt	gtaaaccaat	gaacatttgc	tagttgtatc	aaatcttggg	960
acgcagtatt	tttataccag	tattttatgt	agtgaagatg	tcaattagca	ggaaactaaa	1020
atgaatggaa	attcttaaag	ggaatgatgt	gattcaagct	ggaaagaggg	ttgggagaaa	1080
cagcttgtcc	agggtggagct	atgttatgat	cagatcgaag	tgtgaccctt	gtgtggtcca	1140
gacagccctg	cagagagaaa	acctttatct	gattatcacc	aagcacctcc	tg	1192

<210> 611
 <211> 1897
 <212> DNA
 <213> Homo sapiens

<400> 611		
cgccatctgc	gtgctgggga cgcacagtgt ggggtgtgta ggaggatctg tatttagcac 60	
atttttgcct	ctggctagga caggggtggaa aggggtggcgt ggctacagcc tgacctatgg 120	
gcaccgtcct	accctttgtt ctgtgcttcc gagtgcata catgtgctgg ggtctgtggg 180	
cccatgactc	agacgggtgag ctctgacctt cctgagccag ggctttgtctg tagttgtgcc 240	
tggctcaaga	gctctaggac aaggggaccg ctccaggtct gcactacgg tgtggcaggg 300	
cccttcggca	ctcttgtgca ctagtgtcat ctttccatt gaaatgactg tgaggaccag 360	
aatgtgcaca	tgcatatggg cagctacttg tctgccttgg ccctttatta cacaacttgc 420	
tgggggtgga	gatgccaccc cccggcagtc agagccctt tatgatgtca tggggctggg 480	
tacatgactg	ccaaggggtg ctgctggcca cactgcacta gcaagtttgc cagatggagg 540	
acaagcgatc	attgagtatg gctcgctgtg aagaaagaaa ttcgagagga caggatcatg 600	
gcttggaaaag	ggtgcctttc cctcccagtg tgcagtcaga gacctacctt caccagcag 660	
atccttcccc	tgcttgggac gaccgggggt ccactgggag ccctaacttg aggtgctga 720	
cagaagaaat	cgctttccaa cctctggccg aggaagcttc gttcagaagg ccgcacctg 780	
acggtgacgt	ccgcgccag ggagaagata atctcctctc cctccctttt ccacagaaac 840	
tgtggagact	ggtcagcagc aaccagtttt cgtccatctg gtgggatgac agtggggctt 900	
gtagagtgat	caatcaaaaa ctctttgaaa aggagattct caaaaaggac gtcgcacaca 960	
aagtgtttgc	cacaacttcg ataaagagct tcttccgcca gctaaacttg tatggcttcc 1020	
gaaaacggcg	tcaatgcact ttcaggacct tcaccgcat tttctccgca aaaaggctgg 1080	
tctccatctt	gaataagtta gatttctact gccatcctta ctttcaaaga gactccctc 1140	
acctcctcgt	gaggatgaag agaagagtgg gtgtcaagtc tgcaccaaga catcaggagg 1200	
aggacaagcc	agaagctgct ggatcctgtc tggcaccagc agacactgag caacaagatc 1260	
acacgtctcc	gaatgagaat gaccaggtca caccgcaaca ccgggaaccg gccgggtccca 1320	
acacccaaat	caggagtggc tctgctccac cagcaactcc tgtgatgggt cctgattccg 1380	
ccgtggcgag	tgacaacagt ccagtgacc agccggccgg cgagtgggtca gagggcagcc 1440	
aggctcacgt	cactccgggt gccgctgtcc ctgggectgc agcgtgccc ttctctatg 1500	
tccctggatc	tcccactcag atgaattctt acgggectgt ggtggccctt cccacagcgt 1560	
cccgtagtac	ccttgccatg gacaccagag gacttccctg acctggcatg ctgccctttt 1620	
gccatctctg	ggtaccgggt accctagtgg ctgctggggc tgcacagcct gctgcctcca 1680	
tggctcatgtt	ccccatctc ccagctctgc accaccattg ccccccacag caccgcacgt 1740	
cacagtacat	gccagctagc gatgggcccc aggcgtaccc agactacgca gaccagagca 1800	
catagagggc	agcatttggg cagaatatgt gctggtcaat aaatgtgtca gaaaatgagt 1860	
aattttctga	ctgcacaaaa agtcttcatg gtctcca	1897

<210> 612
 <211> 594
 <212> DNA
 <213> Homo sapiens

<400> 612
 atgtctcaat attcctcgtc ctagaactct cagaggatcc agaactacag ccggctcctcg 60
 ctgggctggt cctgtccatg tgcttgggtca tgggtgctggg gaacctgctc atcatcctgg 120
 ccgtcagccc tgactccccc ctccacacccc ccatgtactt cttcctctcc aacctgtcct 180
 tgcttgacat ggtttcacct ccacatgggt cccaagatg attgtggaca tccaatctca 240
 cagcagtcac ctccatgctg ggctgcctga ctcagatgtc tctttttgct atttttggag 300
 gcatggaaga aagacatgct cctgagtggt atggccctat gaccgggttg tagccatctg 360
 tcacctctca tattattcag ccacatgaa cccatgtttc tgggtgcttc tagttctgtt 420
 gtcttgttgt ctcagtcctt tagactccca gctgcacaat ttgattgctc tgcaaattac 480
 ctgcttcaag gatgtggaaa ttcttaattt cttctgtgac ccttctcaac tccccacca 540
 tgcgtgttgt gacaccttca ccaataacat agtcatgtat ttcctgctg caaa 594

<210> 613
 <211> 2898
 <212> DNA
 <213> Homo sapiens

<400> 613
 agcacacctt ccacagcact ggtctctcct ctcagaactg tgtttccccc acaggctcac 60
 gggctcccaa ggggatacgg ctgcttgctg tgactgagct ccctcctcac agcagagctg 120
 aggtctgggc tccaggtccc cagtggagtc cctcgagac agaaatagcc gagaccatac 180
 aaccaaccaa atacacccct aacaagctta agcgacaaat actcaaaaac ataaaaccca 240
 gtaaagagga aacaccacca cctacacaga caccaaacga cggccacttc cagttttcct 300
 gtgaagtctc tgtgatgtc cctggagca gctgcagcac ggagagaaca atccgcccga 360
 cagctcgcaa accccgacag cgcataaacc gcatcctggg ctctgtgtca aaacatcctg 420
 tagcaaggag ggtcaatgct tacatgatga agatgatgca gaaggacagg aaggccaggg 480
 ctgtggctcc agctccccg actgctgcca gtgtcacttg tgatacagac ctgccccccg 540
 gggccccaca gtgctcagtt gaagggggtc cgggggaccg cagcctccgc ttccgctgct 600
 cgtggcccg cggggccct gctgcctccc tgcagttcca gggctcctcc gaaggcatcc 660
 gcgcccggc agtgtcctct gtgtgctgg cggccgtccc cgccacccc cggctcagcg 720
 gcgtcccat cactgcctt gctcgccacc tgggtggccac gcgtacctgc acagtcacgc 780
 cggggaggcc cctggctcca ggaggcgga gtcgctgctg gctcagtcac gatggcgga 840
 aactccacat cggcaacttc agcctggatt gggacctggg aaattactcc gtgctgtgca 900
 gtgggcccag ggtgctggc ggtgaccaga tcacctgcat tgtgagaagg gtctctagag 960
 tgcgattgca gcaactattc tgcgcccga agagtcttga gacctcagtt tctgagagaa 1020
 gaacctgag gaacagacgt tccctggcgg ccctggcgcc ttcaaaccca gacatgctgc 1080
 tgctgctgct gctgctgccc ctgctctggg ggacaaaggg gatggaggga gacagacaat 1140
 atggggatgg ttacttggc caagtgcagg agctggtgac ggtgcaggag ggcctgtgtg 1200
 tccatgtgcc ctgctccttc tccctacccc aggatggctg gactgactct gaccagttc 1260
 atggctactg gttccgggca ggagacagac cataccaaga cgctccagtg gccacaaaca 1320
 acccagacag agaagtgcag gcagagaccc agggccgatt ccaactcctt ggggacattt 1380
 ggagcaacga ctgctccctg agcatcagag acgcccaggaa gagggataag gggcatatt 1440
 tctttcggct agagagagga agcatgaaat ggagttacaa atcacagttg aattacaaa 1500
 ctaagcagct gtctgtgttt gtgacagacc ctccttgga cttgaccatg actgtcttcc 1560
 aaggagatgc cacagcatcc acagccctgg gaaatggctc atctctttca gtccctgagg 1620
 gccagtctct gcgctggtc tgtgctgtca acagcaatcc ccctgccagg ctgagctgga 1680
 cccgggggag cctgaccctg tgccctcac ggtcctcaaa ccctgggctg ctggagctgc 1740
 ctcgagtga cgtgagggat gaaggggaat tcacctgccg agctcagaac gctcagggt 1800
 cccagcacat ttccctgagc ctctccctgc agaagtgagg caccaggcacc tcaagacctg 1860
 tatcacaaat gacactggca gcagtcgggg gagctggagc caccagccctg gccttctgt 1920
 ccttctgcat catcttcac atagtgggt cctgcaggaa gaaatcggca aggcagcag 1980
 cgggctggg ggatacaggc atggaagatg caaaggccat caggggctcg gcctctcagg 2040
 gaccctgac tgaatcctgg aaagatggca accccctgaa gaagcctccc ccagctgttg 2100
 cccctctgct aggggaggaa ggagagctcc attatgcaac cctcagcttc cataaagtga 2160
 agcctcagga cccgcaggga caggaggcca ctgacagtga atactcggag atcaagatcc 2220
 acaagcgaga aactgcagag actcaggcct gtttgaggaa tcacaacccc tccagcaaag 2280
 aagtcagagg ctgattctca cagaacaaga accctctaga gccccatgct atgcagtagg 2340
 tcaccagggc tccctcctcc tgtctaacca aaacttgac caatgtctcc cctttccccc 2400
 gctaccaggg acccatccct gcctctagct tctactaccc accattctcc tctcagctc 2460
 tctgaggttg actattttag attccacata gagatgaggt catgtgggtac ttgctctct 2520
 gtgtgtggct cattttacac aaaaaatat cccctagggt catccatgtt ctctcaaatg 2580

acagaatcaa	gcaactgaata	tttttttttc	tttgagagat	ggagtttcgc	tctgttgccc	2640
aggctggagt	gcagtgggtc	aatctctgct	cactgcaacc	tccacctcct	gggttcaaac	2700
gattctcctg	cctcagcttc	ccaagtagct	ggtactacag	gcgtgtgtca	ccacgcccag	2760
ctaatttttg	tatttttttag	tagagacggg	gtttcactat	aagtgggcca	ggctagtctc	2820
aaactcctga	cctcaagtga	tctgcctgcc	ttggcctccc	aaagtgtctg	gatttcaggc	2880
atgagccacc	gcacccag					2898

<210> 614
 <211> 440
 <212> DNA
 <213> Homo sapiens

<400> 614						
tactactcag	aagaaatcag	agttaatatt	ttagtgtaaa	ttttttatct	atgaagtaaa	60
caattttaaa	agctaaatat	agagtctcat	ttagaaaaata	tgtattatac	cttgtgtaat	120
tttgatttct	ttacacttca	catgatattg	tttcccaagt	cattaaatat	tcttctaagt	180
aaccagatta	gatcagcaat	agttcactta	aaacagcgaa	caagctgcat	taaaaaccag	240
ccagagcctt	accaaagagc	tgatgctatg	aataccaatc	atagcttagt	tgctgttcca	300
tatgttaatt	taatttgaca	gagtaagagt	ctttgaagtc	ctaattctct	tttgcatcca	360
ataaaccagt	ttttatagtg	cgtgaacttt	tagacatcag	cctgcagcta	aactcatgtc	420
gggaagttgc	catgaggtca					440

<210> 615
 <211> 1327
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1) ... (1327)
 <223> n = a, t, c or g

<400> 615						
aacagtcgac	gatatcggtc	tgtgtgtcag	ccttcctgga	aggcacttaa	atgagttcac	60
agaaggcaaa	gtgaaggaca	tacgtaggtg	actcgagtgt	ccaccatcga	cctgttctgc	120
aacccagctg	tcaaaatcct	gccccaaagt	ctttgacata	agggtaactc	tggtagaatt	180
ttttttaaac	ttaattactt	cctgcaggct	tcagaatggt	tgagcatgaa	aacaaatgga	240
agcaggctta	ctttcagatg	cttattaagg	tctttaccat	gatcaatggt	acctttatga	300
caagcttcat	atgccttggt	aggcagaatg	ttttggatgg	taaaaatcct	gactcccaaa	360
gcatcaacat	tccaagtaac	tacttcagtt	tcagttccgc	tcaccagtgc	tacaggagca	420
gcgtgcagcg	ggtcctgctt	ccattcgact	ggctgtgcag	gacggccaca	aacacacgca	480
gggtgcacct	gcgcttctga	gcagaactct	cggaaatgaag	taatgcagac	gtccacaaat	540
gagatgtgat	ttcactgagg	gaggctgatt	tttagcagtt	gttccttttt	taacagatag	600
tctataagtg	gaaactgacc	tgaaacattc	agctctaaag	aaataatcac	aaagcacctc	660
gggtgcctgat	ttttgcaagg	cagtccttgc	cggaggatcg	ggcattcgtg	cacattcacc	720
cggagaccgt	gctgtccact	tccagaaggg	gaggaagggc	agcgctcaga	agcacgcccc	780
gactgtctcc	agccctgctg	ccccctgctg	aggccatctc	gcctgtcag	cccccaagtt	840
ccccacagt	ccatgtccct	gggttatgaa	tgacacctgg	tgtctgtcag	atccccaccc	900
cattgttctt	gtcaatgagc	aggagtgggg	tggaacctgcc	atcctgcgaa	tcctttacag	960
cctgcaagcg	ctgcctgcca	actcttcaca	accattagca	cccactaaca	atccatttcc	1020
cctggagctc	ttcactctaa	agatagaaga	ccaaaaaata	gaagtgtcct	catttctcac	1080
agtactacag	gaggaggtga	gaaccgattg	catccgtgca	tcttaggaga	atctcatttc	1140
agacctcggc	tttgagtgcg	cctcctgctc	agtcagccct	tttccctcgc	tggcagggtg	1200
acgtgggtca	ggacagtgcg	cagttcaggc	agccttgatt	ttcggttctg	gggtttggtc	1260
caaggattga	ccgggttccn	ttttgttcat	tgccccctcn	tggtgcaacc	cctgggtttg	1320
ttttggc						1327

<210> 616
 <211> 609
 <212> DNA
 <213> Homo sapiens

<400> 616
 tccacccgag gggctcctgag ccctatcctg gtttgttgcc ggaccccaaa gagcattcca 60
 agcaaatcaa cactgacaca ttcattgatc aatgctcaga ttcattcagc tttctctgac 120
 tctecgtga tgcccttcat gcctaagcat gctcccgggc catgactgc agacagttaa 180
 aggaagtgtc gcagcttcct ttaacctgca gcagctgctg tgtctgtacc atgacctgtg 240
 catttcccag cgtccagcag gtgtggatgg agactgtgct gactctgggt gggcttgatg 300
 ctgctcagga tgagatccag gcggtgaggg tcattctcct ccctgagtcc tctcctcagg 360
 ggccacatgg gaacctgggt ccctgttctg caaagccctt ctctcttccc caagtcatgc 420
 ccttgggcac agccccttag ggctaggggc cttcaccctc aggcaggctg acccaccctt 480
 gcaggccagg atggctgagt ccctgctggg gtggagcagc cctggccctg cctctacgaa 540
 ccggagcaca gtttagacct tcgcccgaag aggacagcag ttaccccggc ccaaaccaaa 600
 ggacgcccc 609

<210> 617
 <211> 839
 <212> DNA
 <213> Homo sapiens

<400> 617
 ctgctgctct ggccccctggt cctgtcctgt tctccagcat ggtgtgtctg aggctccctg 60
 gaggtcctct catggcagtt ctgacagtga cactgatggg gctgagctcc ccactggctt 120
 tggctgggga caccagacca cgtttcttgg agtactctac gtctgagtgt catttcttca 180
 atgggacgga gcgggtgcgg ttccctggaca gatacttcta taaccaagag gactacgtgc 240
 gcttcgacag cgacgtgggg gagttccggg cggtgacgga gctggggcgg cctgatgagg 300
 agtactggaa cagccagaag gacttccctg aagacaggcg ggccgcgggtg gacacctact 360
 gcagacacaa ctacgggggt gtggagagct tcacagtga gcggcgagtc catcctaagg 420
 tgactgtgta tccttcaaaag acccagcccc tgcagcacca caacctcctg gtctgttctg 480
 tgagtggttt ctatccaggc agcattgaag tcagggtggt ccggaatggc caggaagaga 540
 agactggggt ggtgtccaca ggctgatcc acaatggaga ctggaccttc cagaccctgg 600
 tgatgttgga aacagtctct cggagtggag aggtttacac ctggcaagtg gagcacccaa 660
 gcgtgacaag ccctctcaca gtggaatgga gagcacggtc tgaatctgca cagagcaaga 720
 tgctgagtgg agtcgggggc tttgtgctgg gctgtctctt ccttggggcc gggctgttca 780
 tctacttcag gaatcagaaa ggacactctg gacttcagcc aagaggattc ctgagctga 839

<210> 618
 <211> 1648
 <212> DNA
 <213> Homo sapiens

<400> 618
 ggtcgaccca cgcgtccgat ttgaagaagt gttttcatct atccaagaaa aatatgatgt 60
 ctccatccca agcctcactc ttattcttaa atgtatgtat ttttatttgt ggagaagttg 120
 tacaaggtaa ctgtgtacat cattctacgg actcttcagt agttaacatt gtagaagatg 180
 gatctaattg aaaagatgaa agtaaaagta atgatactgt ttgtaaggaa gactgtgagg 240
 aatcatgtga tgtaaaaact aaaattacac gagaagaaaa acatttcatg tgtagaaatt 300
 tgcaaaattc tattgtttcc tacacaagaa gtacaaaaaa actactaagg aatatgatgg 360
 atgagcaaca agcttctctg gattatttat ctaatcaggt taacgagctc atgaatagag 420
 ttctcttttt gactacagaa gtttttagaa aacagctgga tccttttctt cacagacctg 480
 ttcagtcaaa tgggttagat tgcaactgata ttaaggatac cattggctct gtcacaaaaa 540
 caccgagtgg tttatacata attcaccagc aaggatctag ctaccattt gaggtaattg 600
 gtgacatgga ttacagagga ggtggatgga ctgtgataca gaaaagaatt gatgggataa 660

ttgatttcca	gaggttgtgg	tgtgattatc	tggatggatt	tggagatctt	ctaggtgatg	720
cattccgggg	tctcaaaaaa	gaagataatc	aaaatgcaat	gcctttttagc	acatcagatg	780
ttgataatga	tgggtgtcgc	cctgcatgcc	tggatcaatgg	tcagtctgtg	aagagctgca	840
gtcacctcca	taacaagacc	ggctgggtgg	ttaacgagtg	tggcttagca	aatctaaatg	900
gcattcatca	cttctctgga	aaattgcttg	caactggaat	tcaatggggc	acgtggacca	960
aaaacaactc	acctgtcaag	attaaatctg	tttcaatgaa	aattagaaga	atgtacaatc	1020
catattttta	ataatctcat	ttaacattgt	aatgcaagtt	ctacaatgat	aatatattaa	1080
agatttttta	aagtttatct	tttcacttag	tgtttcaaac	atattaggca	aaatttaact	1140
gtagatggca	tttagatggt	atgagtttaa	ttagaaaact	tcaattttgt	agtattctat	1200
aaaagaaaaa	atggcttatt	gtatgttttt	acttctgact	atattaacaa	tatacaatga	1260
aatttgtttc	aagtgaacta	caacttgtct	tcctaaaatt	tatagtgtat	ttaaaggatt	1320
ttgccttttc	tttgaagcat	ttttaaacca	taatatgttg	taaggaaaat	tgaagggaat	1380
attttactta	tttttatact	ttatatgatt	atataatcta	cagataatct	ctactgaaga	1440
cagttacaat	aaataacttt	atgcagatta	atatataagc	tacacatgat	gtaaaaacct	1500
tactatttct	aggtagtgcc	ataccatttt	aaaagtagta	agagtttgct	gccccaaatg	1560
tttttcttgt	tttcatactc	aatcatgggt	aactattttg	ttattgtttg	taataaatat	1620
atgtactttt	atatacctgaa	aaaaaaaa				1648

<210> 619

<211> 739

<212> DNA

<213> Homo sapiens

<400> 619

agcgtggtgg	aattcctcag	ccaagatgaa	gcattgccttt	tcaaaaagaa	cacccccaaa	60
taagtatttt	accattatct	aaaagactac	ttttgctggg	ttttattttt	taatctattg	120
aacatgagaa	catgggtcaaa	agtcataact	tccttatggg	tgaaattttc	tagaggtttt	180
ataatattga	gatttcattt	tttaatgata	atttggcctg	acataccttc	cagtatgtac	240
atgtgtatga	gttttatcac	agcattttaa	aatctcttta	tgtttggaat	taataggatt	300
aaaaaaatct	cagtagtttc	tagaaatact	ttatagtgac	agttttgttt	tttagtcttc	360
cagattgttg	atattaatgc	aaacaatatt	aagcttatat	cacaaaaata	ttttcagtaa	420
agcgtatttt	ttataaactg	tgttaggcac	tgggaataat	acaaaaatga	taaataaagc	480
ctgtcccttg	cctgatgtca	cagtcgggct	acagctgcca	gaaacaaggc	cagcaaaatt	540
aggatacagc	ttgcgaatgt	agtgtgaaga	aaggccttcg	gaataccaaa	gaaaattcta	600
gggtcaggga	aagctttgaa	gagaagggtg	tgtttcagct	atgtttgaag	aatggggagg	660
gctcatcagc	gatagaacat	ttctagatag	gcttggaagc	atgagagcat	ggagcaattg	720
ggaacaccca	atatgcccc					739

<210> 620

<211> 1066

<212> DNA

<213> Homo sapiens

<400> 620

cggacgcgtg	ggaaaaaaag	aaagtagtcc	ttgaatcctt	tctgtacaaa	agtctgcctt	60
ctggcttctt	attctaaggg	caaacaggag	gagtaactga	ttccaccga	gagagattca	120
gagtgctctg	gtttcttggc	tgttggtgtg	tgtgggtgat	gggcctgtgt	gtgccttttg	180
ctgtgactac	ctctttcctg	tccttaggct	tagagtggga	cctgaatgtg	cggctgcatg	240
gccagcattt	ggtccagcag	ctggctcctaa	gaacagtgag	gggctactta	gagacgcccc	300
agccagaaaa	ggcccttgct	ctgtcgttcc	acggctgggtc	tggcacaggc	aagaacttcg	360
tggcacggat	gctggtggag	aacctgtatc	gggacgggct	gatgagtgac	tgtgtcagga	420
tgttcacgcg	cacgtttccac	tttcttcacc	ccaaatatgt	ggacctgtac	aaggagcagc	480
tgatgagcca	gatccgggag	acgcagcagc	tctgccacca	gacctgttc	atcttcgatg	540
aagcggagaa	gctgcaccca	gggctgctgg	aggctccttg	gccacactta	gaacgcccgg	600
cccctgaggg	ccacagggct	gagtctccat	ggactatctt	tctgtttctc	agtaatctca	660
ggggcgatat	aatcaatgag	gtggctcctaa	agttgctcaa	ggctggatgg	tcccgggaag	720
aaattacgat	ggaacacctg	gagccccacc	tccaggcgga	gattgtggag	accatagaca	780
atggcttttg	ccacagccgt	cttgtgaagg	aaaacctgat	tgactacttc	atcccccttc	840

tgccttttga	gtaccgtcac	gtgaggctgt	gtgcacggga	tgccttcctg	agccaggagc	900
tcctgtataa	agaagagaca	ctggatgaaa	tagccagat	gatgggtgat	gtccccaagg	960
aggaacaact	cttttcttcc	cagggctgca	agtctatttc	ccaggaggatt	aactacttcc	1020
tgtcatgaag	gctagaggaa	gacttctctg	aactgccttt	cttcca		1066

<210> 621
 <211> 436
 <212> DNA
 <213> Homo sapiens

<400> 621						
ggaaattaaa	agattttaatt	gttaaagtga	agttgggaaa	ttaaaagtct	gtgtaattag	60
tcctgttttt	gccacctgtg	ataaaataat	aaggcttcta	tttatctaag	aagaccggg	120
catacacaac	agtggttttt	aaaaatttac	cgtcaacttg	aagtattttc	ctttctcttc	180
catgaagagc	agtaacattt	tttctctttt	cttattttta	gtaactttta	tcttcctgac	240
ttccatagcc	agcatcttat	tttcttcttg	gtgtcctttt	tcccttatca	aatgtaacca	300
ggatctttat	tatagtggaa	atggggccag	ttgatgaagt	ctaatatgaa	acgaatatatt	360
taactttcaa	atgcagaaga	gctaagttgc	aaagatagca	gaactgtcca	atctgtctac	420
cttcacagca	gtgctg					436

<210> 622
 <211> 787
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)...(787)
 <223> n = a,t,c or g

<400> 622						
gaatcttggt	aagggttggc	tgggatacat	ttatatgctt	tgcagtctct	tccatatatt	60
aatagttaca	ttattgctgg	ccatctcatt	tgggatgtct	tctaggaata	ctctgaatat	120
ggtcaattca	aagattaaag	agcattcact	ccatagaaaa	cttgaaatat	gaaatcttat	180
agctcagata	tgaaggaaac	ttagcagttt	ccccagattt	gacaattcta	aaaattacat	240
ggtgctacta	atacatagtt	gaggatgtaa	aagaagcctc	tataaactgc	caaaaagaaa	300
aataaaaaag	gattttccat	taaaaatgta	tgtgctatgt	aattttaaat	gagatcatgc	360
cattatatag	attttttttt	tttggacgga	gttttgcctc	tgttgcccag	gctggagtgt	420
aatggggcca	tctcggett	ctgcaacctc	cacctcctgg	gttcaagcga	ttctccagcc	480
tcagcctccc	aagtggctga	gattgcaggc	accgccacca	cccccgcaaa	attttggaat	540
tttaagaaga	taggggggttc	aacattttgg	cccggtctgg	cttaaaacttc	tgatccaccc	600
acttaacctn	ccaaaggggc	tgaattacag	ggtgagccac	cgccctgcca	gtatatgaat	660
ttaaaaggg	ggtttgaggc	acactacatt	ttcctagaac	tactccgata	tattttacgg	720
ggaacctaaa	ttttaccctt	gtaaataaaa	aaaaaatatt	ttattccaaa	aaaggatggc	780
cctcccc						787

<210> 623
 <211> 417
 <212> DNA
 <213> Homo sapiens

<400> 623						
ggattatggt	ttggaccttg	gttcagggga	tgtccttact	gtgtctaact	gatgtgttcc	60
aggctcttcc	ttcaatatgt	attgcgaata	gtgagattta	ttacacagtc	ctaacttga	120
tgcagtttaa	ttgcttggtg	atggtgttgt	caggaaaaaa	ggtaatatatt	tcttctgaac	180

tcatgggttag	aaagggcagg	agaagctgga	agtaagatat	cctccatcct	ccttagacat	240
atttacaatca	cctcttccag	gtttgcatat	tgcttacaat	caatacagag	aagagaaaac	300
aaaggaaata	tgtgataagt	tgataaatta	ctgctacaaa	attttaaattc	tggccctaaa	360
gcaataacaa	agtagaacat	agtgaacaa	gtacacaaaa	gattttaaac	tggggat	417

<210> 624

<211> 612

<212> DNA

<213> Homo sapiens

<400> 624

ttagacctaa	ggtgatatga	gaatataatg	tatgtccatc	aagaaaagga	tatatattgtt	60
gagtaaaactt	taaaatttagg	aaggggatca	tctatgatac	attaacatat	atctgatgat	120
acatttagctg	atgatatatg	ctatgatata	ttagcatatt	ctaattagca	tatatcatca	180
gcatatatgg	gaatgtcatt	ggcatgtatt	tgaagccctt	aatatacttt	tctatattga	240
tattttttgag	tcaaaggagt	aaattatccc	ttccctacaa	tgttcacaa	tgtatgaata	300
taagtgaaaga	taggcgacc	cagaaagtac	agctgcttca	gttgactacta	taagtaatca	360
tcatacctgca	agaagtatgt	tgtgacttct	cctacaatta	actatcatat	agtttaatat	420
atgtttaata	ttattataaa	aagtagaaaa	ataaaattta	tttagaagca	aggattagat	480
tgcaataatt	atttatattta	taattttctag	catgtttggg	gagggaccat	ttaggttcct	540
aaaccaatgg	gctgggtttt	ttaaaaccaa	aaccttccac	caaaagtttt	tagctttaac	600
cttaaaaaaag	gc					612

<210> 625

<211> 434

<212> DNA

<213> Homo sapiens

<400> 625

gtctcgattc	cgacgcacca	cgctccgttc	tcttatttca	aaattacata	ttcttataca	60
ctatggaact	tggaaaataa	gggaaagcat	aaagaaaatt	taaatacccc	ataatttcac	120
aaaccagaga	tgaaaccact	gctaacagtt	gctgtaattt	cttccagtct	cttttctaca	180
gtgagatctg	tatttctagc	tggtcacaca	tagtataaat	ctaggtttag	aatcaagtag	240
aaatagctct	agagtgtctc	cgatgtctgc	attggctctg	atagtggatc	tcattttatcc	300
ctgggtccag	gtgagaggtc	ctgaggaccc	aaatcatggg	acaacagaga	gaaaaagaga	360
agaggtgacc	tgcttagggg	cggcccggtc	gagtttggaa	gccgcaaggt	gaactccctc	420
catgggagaa	agct					434

<210> 626

<211> 1026

<212> DNA

<213> Homo sapiens

<400> 626

gaaactgcaa	gagtggggca	gagaaccaga	gtgtcagagc	aaaacctcct	ctatctgcac	60
atcctggggga	cgaaccgggc	agccggagag	ctgcggccgg	cccagtcctc	ctccgccttt	120
gaagggtaaa	accaaggcg	gggccttggt	tctggcagaa	gggacgctat	gaccgcagaa	180
ttcctctccc	tgctttgcct	cgggctgtgt	ctgggctacg	aagatgagaa	aaagaatgag	240
aaaccgcca	agcctccct	ccacgcctgg	cccagctcgg	tggttgaagc	cgagagcaat	300
gtgaccctga	agtgtcaggc	tcattcccag	aatgtgacat	ttgtgctg	caaggtgaac	360
gactctgggt	acaagcagga	acagagctcg	gcagaaaacg	aagctgaatt	ccccttcacg	420
gacctgaagc	ctaaggatgc	tgggagggtac	ttttgtgcct	acaagacaac	agcctcccat	480
gagtggtcag	aaagcagtga	acacttgcag	ctgggtggta	cagataaaca	cgatgaactt	540
gaagctccct	caatgaaaac	agacaccaga	accatctttg	tcgccatctt	cagctgcatc	600
tccatccttc	tcctcttctc	ctcagtcctc	atcatctaca	gatgcagcca	gcacagttca	660

tcatctgagg	aatccaccaa	gagaaccagc	cattccaaac	ttccggagca	ggaggctgcc	720
gaggcagatt	tatccaatat	ggaaagggtg	tctctctcga	cggcagaccc	ccaaggagtg	780
acctatgctg	agctaagcac	cagcgccctg	tctgaggcag	cttcagacac	caccagggag	840
cccccaggat	ctcatgaata	tgcggcactg	aaagtgtagc	aagaagacag	ccctggccac	900
taaaagaggg	gggatcgtgc	tggccaaggt	tatcggaaat	ctggagatgc	agatactgtg	960
tttccttgct	cttcgtccat	atcaataaaa	ttaagtttct	cgtcttaaaa	agaaaaaaaa	1020
aaaaaa						1026

<210> 627

<211> 1821

<212> DNA

<213> Homo sapiens

<400> 627

tttcgtgagg	aagttcaagg	gcgagagtga	gtaccagcag	aaggctggga	gtctgtagtt	60
tgttccctgct	gccaggtccc	actgagggga	acggggacct	gtctgaagag	aagatgcccc	120
tgctgacact	ctacctgctc	ctcttctggc	tctcaggcta	ctccattgcc	actcaaatca	180
ccggtccaac	aacagtgaat	ggcttgagc	ggggtcctt	gaccgtgcag	tgtgtttaca	240
gatcaggctg	ggagacctac	ttgaagtggg	ggtgtcgagg	agctatattg	cgtgactgca	300
agatccttgt	taaaaccagt	gggtcagagc	aggaggtgaa	gagggaccgg	gtgtccatca	360
aggacaatca	gaaaaaccgc	acgttcactg	tgacctgga	ggatctcatg	aaaactgatg	420
ctgacactta	ctgggtgtga	attgagaaaa	ctggaaatga	ccttgggggtc	acagttcaag	480
tgaccattga	cccagcgtcg	actcctgccc	ccaccacgcc	tacctccact	acgtttacag	540
caccagtcac	ccaagaagaa	actagcagct	ccccaaactct	gaccggccac	cacttgagca	600
acaggcacaa	gctcctgaag	ctcagtgctc	tcctgcccc	catcttcacc	atattgctgc	660
tgcttttggt	ggccgcctca	ctcttggtct	ggaggatgat	gaagtaccag	cagaaagcag	720
ccgggatgtc	cccagagcag	gtactgcagc	ccctggaggg	cgacctctgc	tatgcagacc	780
tgaccttgca	gctggccgga	acctccccgc	aaaagggtac	cacgaagctt	tcctctgccc	840
agggtgacca	ggtggaagtg	gaatatgtca	ccatggcttc	cttgccgaag	gaggacattt	900
cctatgcata	cttgaccttg	ggtgctgagg	atcaggaacc	gacctactgc	aacatggggc	960
acctcagtag	ccacctcccc	ggcagggggc	ctgaggagcc	cacggaatac	agcaccatca	1020
gcaggcctta	gcctgcactc	caggctcctt	cttggacccc	aggctgtgag	cacactcctg	1080
cctcatcgac	cgtctgcccc	ctgctcccc	catcaggacc	aacccggggg	ctggtgcctc	1140
tgcttgatca	gccagcattg	cccctagctc	tggtgtgggc	ttggggccaa	gtctcagggg	1200
gcttctagga	gttgggggtt	tctaaacgtc	ccctcctctc	ctacatagtt	gaggaggggg	1260
ctagggatata	gctctggggc	tttcatggga	atgatgaaga	tgataatgag	aaaaatgtta	1320
tcattattat	catgaagtac	cattatcata	atacaatgaa	cctttattta	ttgcctacca	1380
catgttatgg	gctgaataat	ggcccccaaa	gatatctgtg	tcctaactct	cagaacttgt	1440
gactgttacc	ttctgtggca	gaaagggaca	gtgcagatgt	atgtaagtta	aggactttga	1500
gatagagagg	ttattcttgc	tgattcaggt	gggcccacaa	tatcaccaca	agggtcctca	1560
taagaagagag	gccagaaggt	caaagaggta	gagacaaaag	gatgatggaa	gtggacgtgg	1620
gtgtgacgtg	agcagggggc	atgaatgccg	cagccttcag	atgccagaaa	gggaaaggaa	1680
tggattcccc	tgcttgagag	ctccaaaaga	aaccagccct	gcccacgcct	tgacttgagc	1740
ccattgaaac	tgatcttgag	ctcctggcct	ccagaattgc	aggagaataa	atttgtgttg	1800
tttttaata	gaaaaaaaaa	a				1821

<210> 628

<211> 821

<212> DNA

<213> Homo sapiens

<400> 628

cctgctcgac	gggaggcagg	aggggagctc	cactaaacct	tccttggtctg	gagtcagcca	60
aacatgagga	ttagtggccc	ttggtgcttg	tggaatctct	ccttggaagt	gggaggcact	120
gtggcgacca	ctgcccagca	gcacatagca	gaggtgtgca	gaagcagcca	ggcagggaga	180
ggttttctcc	actgtttgca	cccagcactg	ggcacttctg	gatgccaccc	tgctccttgc	240
agcagctccc	tggtgggctt	tggatggagg	ggctactcag	gagaagccag	ctgggggagg	300
gccagcagcc	ggccagcagc	cccactcct	cccatgccag	ccaacgtaca	ggccggatgg	360

gaacagtctg	tgaggctttt	gtgccactcc	tggctgcgct	tggcagctct	gcatgtcaca	420
catgaggaat	cctgagcttc	aaaatggccc	aggaatccag	catgagctgt	gctaggagtc	480
aagaggtttg	ccacgactgg	gcttggttcc	ttgttcata	gcgagcagct	ccctcagctc	540
atccatctag	ctgggtgacg	ttcctgaaca	ccaggggaga	ccaggctctg	ttctaggcac	600
gggcagcag	gaggaagact	gcacggcccc	tgaagctagt	gctgggggac	aggggtgggg	660
tggcatggcc	ctcatcacca	gccgcctcg	agtctgtgcc	agagcagatt	ggggtgacaa	720
cagactgcac	tgtgtgggg	gaggggcagc	atgtggctgg	cccccacatg	aggggagata	780
tggtagggga	ggcaccttgg	cctgttgcca	atgggtggga	a		821

<210> 629

<211> 877

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1) ... (877)

<223> n = a,t,c or g

<400> 629

agtgccctg	atcacccaag	ttggccagt	accctgggt	ggggctgatt	ctgtctggat	60
atacggggg	gggtaagcat	gaggaaagga	agcaggtcct	gacaggtact	ttgcactaaa	120
cagctcctta	taagggttctc	aatttgcctg	ctcaatttct	acagacattt	gtgggaccac	180
accagtacat	tgtaaaagca	ggaacaatt	gagaaaaacc	tgagttttat	gttggtagga	240
gaaatgccta	tggaatatgg	caaatcggtt	ctctgagact	tcctccctag	taattacata	300
tttgttctca	aaaacaaatg	ccagaaggaa	gaagcagatt	taatagtgc	ttttacaagg	360
caccattaat	ctctaagaag	aacaattaaa	atgtctcagc	aatcatggtt	cactgtatat	420
cttttctatc	ttcttagaag	taatatatgg	ctggaaatgg	gcataccaaa	atatgtcaag	480
gaagtggga	tgcggttcatt	agatttcacc	agtaattatt	ttagttagct	tcacagatct	540
ctcttccttg	cttgttcttg	agagcgaggc	tttttagtag	gaagagaaat	tgtctaaaac	600
gattaataac	cacaaattca	ccaaactatt	ttgggtaagt	ccctctattt	ctctaggtct	660
aaagctagga	ataagagtca	ttctcatata	atgtactgtc	ccagaaagg	cattannnnn	720
nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	780
nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	nnnnnnnnnn	840
nnnaggcaca	tcttacatgg	tggcagacaa	gacagaa			877

<210> 630

<211> 3229

<212> DNA

<213> Homo sapiens

<400> 630

cacattcctc	ctctgaagaa	gcccctggga	gcacagctca	tcaccatgga	ctggacctgg	60
aggttcctct	ttgtggtggc	agcagctaca	ggtgtccagt	cccaggtaca	actggtgcag	120
tctggggctg	agggtgaagaa	gcctgggtcc	tcgggtgaagg	tctcctgcaa	ggcttctgga	180
ggcaccttca	gcacctatgc	tatcagctgg	gtgcgacagg	cccctggaca	agggcttgag	240
tggatgggag	ggatcatccc	tatctttggt	acagcaaact	acgcacagaa	gttccagggc	300
agagtcaag	ttaccgcgga	cgaatccacg	agcacagcct	acatggaact	gagcagcctg	360
agatctgagg	acacggccgt	gtattactgt	gcgagagttt	ggggtggttc	ggggagttat	420
tattccatag	tgtctacgat	tggagccact	actacggtat	ggatgtcttg	ggccagggaa	480
ccctgggtcac	cgtctcctca	gcctccacca	agggcccatc	ggtcttcccc	ctggcaccct	540
cctccaagag	cacctctggg	ggcacagcgg	ccctgggctg	cctgggtcaag	gactacttcc	600
ccgaaccgg	gacggtgtcg	tggaaactcag	gcgcccgtgac	cagcggcgtg	cacaccttcc	660
cggctgtcct	acagtcctca	ggactctact	ccctcagcag	cgtgggtgacc	gtgccctcca	720
gcaacttggg	caccagagcc	tacatctgca	acgtgaatca	caagcccagc	aacaccaagg	780
tggacaagaa	agttgagccc	aaatcttgtg	acaaaactca	cacatgcccc	ccgtgcccag	840
cacctgaact	cctgggggga	ccgtcagctc	tctcttccc	cccaaaaccc	aaggacaccc	900
tcatgatctc	ccggacccct	gaggtcacat	gcgtgggtgg	ggacgtgagc	cacgaagacc	960

ccgaggtcaa	gttcaactgg	tacgtggacg	gcgtggaggt	gcataatgcc	aagacaaagc	1020
cgcgggagga	gcagttcaac	agcacgtacc	gtgtgggtcag	cgctcctcacc	gttgtgcacc	1080
aggactggct	gaacggcaag	gagtacaagt	gcaaggtctc	caacaaagcc	ctcccagccc	1140
ccatcgagaa	aaccatctcc	aaaaccaaag	ggcagccccc	agaaccacag	gtgtacaccc	1200
tgcccccatc	ccgggaggag	atgaccaaga	accaggtcag	cctgacctgc	ctgggtcaaag	1260
gcttctatcc	cagcgacatc	gccgtggagt	gggagagcaa	tgggcagccg	gagaacaact	1320
acaagaccac	gcctcccgtg	ctggactccg	acggctcctt	cttctcttat	agcaagctca	1380
ccgtggacaa	gagcagggtg	cagcagggga	acgtcttctc	atgctccgtg	atgcatgagg	1440
ctctgcacaa	ccactacacg	cagaagagcc	tctccctgtc	cccggtgtaa	tgagtgcgac	1500
ggcgcgcaag	ccccgcctcc	ccgggctctc	gcggctgcac	gaggatgctt	ggcacgtacc	1560
ccgtctacat	acttcccagg	caccagcat	ggaaataaag	caccaccac	tgccctggga	1620
agtatgtaca	gggggtacgt	gccaagcatc	ctcgtgcgac	cgcgagagcc	cgggggagcg	1680
gggggctttg	cgtgcgggtc	gcactcatth	aaccgggga	caggaaaagg	ctcttttgcg	1740
tgtagtgggt	tgtgcagagc	gtcatgcat	caccggagca	tgagaaagac	gttccccttg	1800
ttgtccttct	tccgggcttg	caacggggag	ctttgttata	gaggaagaag	ggagccgtcc	1860
ggagtccacc	cacgggaagg	cggggtcttt	ggaattggtt	ctccggttgc	ccattggctc	1920
tcccactccc	acgggcgaat	gtcgtgggga	taagaaggct	tttgaccagg	caaggtcagg	1980
gctgaccatg	gtttcttggt	acatctccct	cccggaatg	gggcgcagcg	gtgtaccacc	2040
ttgtggttct	tccgggcttg	cccttttggt	ttttgaaaa	aggttttctt	aaaaaggggg	2100
cctgggaggg	gctttggttg	gagacccttg	caacttgtaa	ctcccttgcc	cattcaaccc	2160
aatcctgggt	gccaggaacg	gtgaggaacg	ctgaaccaca	cgggtaccgg	cctgtttgta	2220
ctgactcttc	ccgcggcttt	gtcttggcac	ttatgtacct	ccaaggccgt	tccacgtacc	2280
aagttagaac	ttgtacctca	ggggtcttcc	gtgggtccac	gtccaccacc	acgcatgtag	2340
acccctaggg	gtcccgagg	atcatgagg	tgctcttggt	tttgggggga	aaaaagaaaa	2400
ctccccggtc	cccccaggaa	gtcaaggtgt	tgggcacggg	gggcatgtgc	gagttttgtc	2460
acaagatttg	ggctcaactc	tcttgtccac	cttgggtgtg	ctgggcttgt	gattcacgtt	2520
gcagatgtag	gtctgggtgc	ccaagctgct	ggagggcacg	gtcaccacgc	tgctgagggg	2580
gtagagtcct	gaggactgta	ggacagccgg	gaaggtgtgc	acgcgcgtgg	tcagggcgcc	2640
tgagttccac	gacaccgtca	ccggttcggg	gaagtagtcc	ttgaccaggc	agcccagggc	2700
cgctgtgccc	ccagaggtgc	tcttggagga	gggtgccagg	gggaagaccg	atgggccctt	2760
ggtggaggct	gaggagacgg	tgacatgggt	tccctggccc	cagtagtcca	caagcgggct	2820
accaggcgct	gccaaccccc	tcaaggtcgc	acagtaataa	acggccgtgt	cttcatactt	2880
caggccgctc	agctccatgt	agactgtgct	cgtggatttg	tccgcggtaa	tcgtgactct	2940
gccctgaaat	tgctgtgctg	agtttccaac	accgaggata	gggataatcc	ttcccatcca	3000
ctcaagtcct	tgtccagggg	cctgtcgcac	ccagctgaca	gcatagctgc	tgaagggtgc	3060
tccagaagcc	ttgcaggaga	ccttcaccga	ggaccagggc	tccttcacct	cagccccaga	3120
ctgcaccagc	tggacctggg	actggacacc	tggtgctgct	gccaccacaa	agaggaacct	3180
ccaggtccag	tccatgggtg	tgagctgtgc	tcccaggggc	ttcttttaga		3229

<210> 631

<211> 3229

<212> DNA

<213> Homo sapiens

<400> 631

cacattctct	ctctgaagaa	gccccgggga	gcacagctca	tcaccatgga	ctggacctgg	60
aggttcctct	tttgtggtgg	agcagctaca	ggtgtccagt	cccaggtaca	actggtgcag	120
tctggggctg	aggtgaagaa	gcctgggtcc	tcggtgaagg	tctcctgcaa	ggcttctgga	180
ggcaccttca	gcacctatgc	tatcagctgg	gtgcgacagg	cccctggaca	agggcttgag	240
tggatgggag	ggatcatccc	tatctttggt	acagcaaaact	acgcacagaa	gttccagggc	300
agagtcacga	ttaccgcgga	cgaatccacg	agcacagcct	acatggaact	gagcagcctg	360
agatctgagg	acacggcccgt	gtattactgt	gcgagagttt	gggggtggtc	ggggagttaa	420
tattccatag	tgtctacgat	tggagccact	actacggtat	ggatgtctgg	ggccagggaa	480
ccctggtcac	cgtctcctca	gcctccacca	agggcccatc	ggtcttcccc	ctggcacctt	540
cctccaagag	cacctctggg	ggcacagcgg	ccctgggctg	cctggtcaag	gactacttcc	600
ccgaaccggg	caggggtgtc	tggaaactcag	gcgcctgcac	cagcggcggt	cacaccttcc	660
cggctgtcct	acagtcctca	ggactctact	ccctcagcag	cgtggtgacc	gtgccctcca	720
gcaacttggg	caccagagac	tacatctgca	acgtgaatca	caagcccagc	aacaccaagg	780
tggacaagaa	agtttgagccc	aaatcttgtg	acaaaactca	cacatgcccc	ccgtgcccag	840
cacctgaact	cctgggggga	ccgtcagctt	tcctcttccc	cccaaaaccc	aaggacaccc	900
tcatgatctc	ccggacccct	gaggtcacat	gcgtggtggt	ggacgtgagc	cacgaagacc	960

ccgagggtcaa	ggttcaactgg	tacgtggagcg	gcgtggaggt	gcataatgcc	aagacaaagc	1020
cgcgaggagga	gcagttcaac	agcacgtacc	gtgtgggtcag	cgctcctcacc	gttgtgcacc	1080
aggactgggt	gaacggcaag	gagtagcaagt	gcaaggtctc	caacaaagcc	ctcccagccc	1140
ccatcgagaa	aaccatctcc	aaaaccaaag	ggcagccccg	agaaccacag	gtgtacaccc	1200
tgcccccatc	ccgggaggag	atgaccaaga	accaggtcag	cctgacctgc	ctgggtcaaag	1260
gcttctatcc	cagcgacatc	gccgtggagt	gggagagcaa	tgggcagccg	gagaacaaact	1320
acaagaccac	gcctcccgtg	ctggactccg	acggctcctt	cttcctctat	agcaagctca	1380
ccgtggacaa	gagcaggtgg	cagcagggga	acgtcttctc	atgctccgtg	atgcatgagg	1440
ctctgcacaa	ccactacacg	cagaagagcc	tctccctgtc	cccgggtaaa	tgagtgcgac	1500
ggccggcaag	ccccgcctcc	ccgggtctct	gcgggtcgac	gaggatgctt	ggcacgtacc	1560
ccgtctacat	acttcccagg	caccagcat	ggaaataaag	caccaccac	tgccctggga	1620
agtatgtaca	gggggtacgt	gccaagcatc	ctcgtgcgac	cgcgagagcc	cgggggagcg	1680
gggggtcttg	cgtgccggtc	gcactcattt	aaccgggaa	caggaaaagg	ctcttttgcg	1740
tgtagtgggt	tgtgcagagc	gctcatgcat	caccggagca	tgagaaagac	gttccccttg	1800
ctgccacct	gctctttgtc	caacggggag	ctttgttata	gaggaagaag	ggagccgtcc	1860
ggagtccacc	cacgggaagg	cgggtctctt	ggaatttggt	ctcgggtgc	ccattggctc	1920
tcccactccc	acgggcgaat	gtcgtggga	taagaaggct	tttgaccagg	caaggtcagg	1980
gctgaccatg	gtttcttggg	acatctccct	cccgggaatg	gggcgcagcg	gtgtaccacc	2040
ttgtggttct	tccgggcttg	cccttttggc	ttttggaaaa	aggttttctt	aaaaaggggg	2100
cctgggaggg	gcttttggtg	gagacccttg	caacttgtaa	ctcccttgcc	cattcaaccc	2160
aatcctgggt	gccaggaacg	gtgaggaacg	ctgaaccaca	cgggtaccgg	cctgtttgta	2220
ctgactcttc	ccgcggcttt	gtcttggcac	ttatgtacct	ccaaggccgt	tccacgtacc	2280
aagttggaac	tgttacctca	gggttcttcc	gtgggtccac	gtccaccacc	acgcatgtag	2340
acccctaggg	gtcccggagg	atcatgaggg	tgtccttggt	tttgggggga	aaaaagaaaa	2400
ctccccggtc	cccccaggaa	gtcaaggtgt	tgggcacggg	gggcatgtgc	gagttttgtc	2460
acaagatttg	ggctcaactc	tcttgtccac	cttgggtgtg	ctgggcttgt	gattcacgtt	2520
gcagatgtag	gtctgggtgc	ccaagctgct	ggagggcacg	gtcaccacgc	tgctgaggga	2580
gtagagtccct	gaggactgta	ggacagccgg	gaaggtgtgc	acgccgctgg	tcagggcgcc	2640
tgagttccac	gacaccgtca	ccggttcggg	gaagtagtcc	ttgaccaggc	agcccagggc	2700
cgctgtgccc	ccagaggtgc	tcttggagga	gggtgccagg	gggaagaccg	atgggccctt	2760
ggtggaggct	gaggagacgg	tgacatgggt	tccctggccc	cagtagtcca	caagcgggct	2820
accaggcgct	gccaaacccc	tcaaggtcgc	acagtaataa	acggccgtgt	cttcatatct	2880
caggccgctc	agctccatgt	agactgtgct	cgtggatttg	tccgcggtaa	tcgtgactct	2940
gccctgaaat	tgctgtgcgt	agtttccaac	accgaggata	gggataatcc	ttcccatcca	3000
ctcaagtccct	tgtccagggg	cctgtcgcac	ccagctgaca	gcatagctgc	tgaaggtgcc	3060
tccagaagcc	ttgcaggaga	ccttcaccga	ggaccagggc	tccttcacct	cagccccaga	3120
ctgcaccagc	tggacctggg	actggacacc	tgttgctgct	gccaccacaa	agaggaaacct	3180
ccaggtccag	tccatgggtga	tgagctgtgc	tcccaggggc	ttctttaga		3229

<210> 632
 <211> 1520
 <212> DNA
 <213> Homo sapiens

<400> 632						
atggaggagc	tttttaggaac	tgtatttgtg	atctgggtggc	tttggcctgg	cagctacggc	60
accagtgcag	ctgatactca	aggttcagat	cagaagagga	ggcttctcac	cctgcagcag	120
ggacctgtga	gcattggcatg	ccctggcttc	ctgtgggcac	ttgtgatctc	cacctgtctt	180
gaatttagca	tggtctcagac	agtcactcag	tctcaaccag	agatgtctgt	gcaggaggca	240
gagaccgtga	ccctgagctg	cacatatgac	accagtgaga	gtgattatta	tttattcttg	300
tacaagcagc	ctcccagcag	gcagatgatt	ctcgttattc	gccaaagaagc	ttataagcaa	360
cagaatgcaa	cagagaatcg	tttctctgtg	aacttcacga	aagcagccaa	atccttcagt	420
ctcaagatct	cagaactcaca	gctgggggat	gccgcgatgt	atttctgtgc	ttataggagc	480
ggaagagatg	acaagatcat	ctttggaaaa	gggacacgac	ttcatattct	ccccaatatc	540
cagaaccctg	accctggcgt	gtaccagctg	agagactcta	aatccagtga	caagtctgtc	600
tgccatttca	ccgattttga	ttctcaaaca	aatgtgtcac	aaagtaaggga	ttctgatgtg	660
tatatcacag	acaaaactgt	gctagacatg	aggctctatg	acttcaagag	caacagtgtc	720
gtggcctgga	gcaacaaatc	tgactttgca	tgtgcaaacg	ccttcaacaa	cagcattatt	780
ccagaagaca	ccttcttccc	cagccagaaa	agttcctgtg	atgtcaagct	ggtcgagaaa	840
agctttgaaa	cagatacgaa	cctaaacttt	caaaacctgt	cagtgatttg	gttccgaatc	900
ctcctcctga	aagtggccgg	gtttaactctg	ctcatgacgc	tgccgctgtg	gtccagctga	960

gatctgcaag	attgtaagac	agcctgtgct	ccctcgctcc	ttcctctgca	ttgccccctc	1020
tctccctctc	caaacagagg	gaactctcct	acccccaaag	aggtgaaagc	tgctaccacc	1080
tctgtgcccc	cccggaactg	ccaccaactg	gatcctaccc	gaatttatga	ttaagattgc	1140
tgaagagctg	ccaaacactg	ctgccacccc	ctctgttccc	ttattgctgc	ttgtcactgc	1200
ctgcatttca	cggcagaggg	aaggctgctg	cagcctcccc	tggtctgtga	cattccctcc	1260
tgctccccag	agactgcctc	cgccatccca	cagatgatgg	atcttcagtg	ggttctcttg	1320
ggctctaggt	cctggagaat	gttgtagagg	gtttatTTTT	ttttaatagt	gttcataaag	1380
aaatcatatg	tattcttctt	ctcaagacgt	ggggggaaat	tatctcatta	tcgaggccct	1440
gctatgctgt	gtgtctgggc	gtgttgatg	tcctgctgcc	gatgccttca	ttaaaatgat	1500
ttggaagagc	aaaaaaaaaa					1520

<210> 633
 <211> 668
 <212> DNA
 <213> Homo sapiens

<400> 633						
attcccggtg	cgacgatttc	gtatatatTT	ctaattgattg	ggcttttagct	ttaaaaacat	60
taggctagat	gcctccctat	tttttTgtggc	atgatttagc	tgtaactagc	ctggaggcaa	120
taacaatact	aaatgacctt	ttgtagtCAC	attaaacatt	gaaatggtac	tgagactgcc	180
ttggtgggga	gttttTggcct	atgggaatga	tgtgggtttt	ggtttctact	cctttctctg	240
ttatcagata	aatcctccta	catgtcccat	tctctggctc	tggaagtac	tgacagtagg	300
gaaaagttag	tacactcatc	tcattgttca	gatcaagttt	cctgggtgcg	gttttgcaga	360
acttcctaca	agagctgact	caagagttct	cttctattgt	ggagatgatc	ctgctcttat	420
atgtcatact	aatttatatc	ctagaaactg	tgagcagcat	catttgcatg	tgtaagttg	480
ggaatgaata	aagtgaataa	attttcacac	attccttgag	aaaagggttc	cttttgcgtg	540
gcaaatcaac	gctccctaga	tgctgtggct	aaaaagtgaa	gaattctagg	ccaacatttt	600
tttacccttt	tcatttcctt	tacttgcttg	tttttagaaa	gcgtgcgagg	tcctgggacc	660
caaaggta						668

<210> 634
 <211> 1833
 <212> DNA
 <213> Homo sapiens

<400> 634						
gaattcccg	gtcgacgatt	tcgtcaggag	ggagaaggag	gagccagcgg	aaggacgggtg	60
tgcggggcgg	ccagccctgg	acgaaagaag	agggccctcc	caggccagtc	tgggcaccct	120
gggatatcgg	ctgcagccag	gcatggccga	ctctgcacag	gccagaagc	tggtgtacct	180
gggtcacagg	ggctgtggct	tcctgggaga	gcacgtggtg	cgaatgctgc	tgacagggga	240
gccccggctc	ggggagctgc	gggtctttga	ccaacacctg	ggtccctggc	tggaggagct	300
gaagcacagg	cctgtgaggg	tgactgccat	ccagggggac	gtgacccagg	cccatgaggt	360
ggcagcagct	gtggccggag	cccatgtggt	catccacacg	gctgggctgg	tagacgtgtt	420
tggcagggcc	agtcccaaga	ccatccatga	ggtcaacgtg	cagggtaccc	ggaacgtgat	480
cgaggcttgt	gtgcagaccg	gaacacgggt	cctggtctac	accagcagca	tggaagttgt	540
ggggcctaac	accaaagggtc	accccttcta	caggggcaac	gaagacaccc	catacgaagc	600
agtgcacagg	caccctatc	cttgcagcaa	ggccctggcc	gagtggctgg	tcctggaggc	660
caacggggag	aaggtccgtg	gggggctgcc	cctggtgacg	tgtgcccttc	gtcccacggg	720
catctacgg	gaaggccacc	agatcatgag	ggacttctac	cgcaggggcc	tgcgctggg	780
aggttggtc	ttccgggcca	tcccggcctc	tgtggagcat	ggccgggtct	atgtgggcaa	840
tggtgcctgg	atgcacgtgc	tggcagcccg	ggagctggag	cagcgggcaa	ccctgatggg	900
cggccaggta	tacttctgct	acgatggatc	accctacagg	agctacgagg	atttcaacat	960
ggagtctcct	ggccctcgcg	gactgcggct	ggtgggcgcc	cgccatttgc	tgccctactg	1020
gctgctgggt	ttcctggctg	ccctcaatgc	cctgctgcag	tggtgctgc	ggccactggt	1080
gctctacgca	ccctgctgta	acccctacac	gctggccgtg	gccaacacca	ccttcaccgt	1140
cagcacggac	aaggctcagc	gccatttcgg	ctatgagccc	ccgttctcgt	gggaggatag	1200
cgggaccgcg	accattctct	gggtacaggg	cgctacgggt	tcagcccagt	gacggtgggg	1260
ctggggcctg	gaggccca	tacagcacat	ccaccagggt	cccgagccct	cacaccctgg	1320

acgggaaggg	acagctgcat	tccagagcag	gaggcagggc	tctggggcca	gaatggctgt	1380
ccttctcgta	gagccctcca	cattttcttt	ttcttttttg	agacagggtc	ttgctctgtc	1440
accagactg	gagtgcatg	gtgtgatcat	agctcactgc	accctcaacc	tcctgggttc	1500
aagcaatcct	cctgcctcag	cctcctgaac	agctgggacc	acaggtgcac	gccaccacac	1560
ctggcttttt	tttgttgttt	ttagagacag	ggtctcacta	tattgctcag	gctggtcttg	1620
aactcctggg	ctcaagtgat	cttcccacgt	gggcctccca	aaacgctgga	actacaagtg	1680
tgagccaccg	cgccctggcc	caagccctcc	acattttcaa	tccaggaagc	cttgagtctg	1740
tgttgtgtcc	tgacacctcc	aagttcttaag	ggccgtcagg	acaacgggga	gggtttgggg	1800
acagagtgtc	cttcctctgt	cctctcatcc	cag			1833

<210> 635
 <211> 1253
 <212> DNA
 <213> Homo sapiens

<400> 635						
ctgggttctg	gaggccctgg	gaccgcggaa	gaggtctcag	acgctgcagc	gatgcctcgc	60
ccacggcggg	tcagtcagct	cctggatcta	tgcttttggt	gcttcatgaa	gaatatttcc	120
agatatctca	cagacattaa	gcctttgcct	cccaacataa	aagacagact	gattaaaata	180
atgagtatgc	agggacagat	aacagattca	aataataagt	agattttaca	tcctgaagtc	240
caaatcttag	atctacggag	ctgcgatata	tcagatgctg	ctctcctgca	cctgtctaac	300
tgtagaaaac	tgaagaaaatt	aaatttaaat	gcttcaaaaag	ggaaccgagt	ttctgtaact	360
tcagaaggaa	taaaagctgt	ggcttcatct	tgctcatacc	tacacgaagc	ttctttgaaa	420
agatgctgca	atctcactga	cgaaggagtc	gttgctcttg	cactcaattg	ccagctgcta	480
aagatcatcg	attttaggtgg	ctgcttaagt	attactgatg	tgctccttaca	tgcattagga	540
aaaaactgcc	catttttgca	gtgtgtcgac	ttttcagcta	ctcaggtatc	tgacagtggg	600
gtgattgcac	ttgttagtgg	accttgtgcg	aagaaattag	aggagattca	tatgggacat	660
tgtgtaaatc	tgactgatgg	ggctgtcgaa	gctgtcctta	cttactgtcc	tcaaatacgt	720
atattactct	tccatggatg	ccccttgata	acagatcatt	cccagagaagt	gttgaggcaa	780
ttagtagggc	caaacaaact	aaagcaagt	acatggactg	tttattgatg	cttttttgaa	840
gatgatcaat	gctaggaaaag	cttatcaaaa	ctactttccc	aggaaccat	ctatagagat	900
ttgcattcta	cttaatgtta	acactatttt	taattatttt	attgtcttaa	gttataactc	960
tcagagaatt	agctaagtct	tggtatatac	atgggtttgtg	ctttactctt	aaacatcttt	1020
aaagtgtcat	tattctatat	ctgttgatg	agtcattatt	tttgaatga	taactctagc	1080
atgaactctg	atctatgggtg	ttggattctg	tttcttaaat	aactttaaaa	ttactgtttt	1140
tcccttgaga	tttcttcttc	ctatgtagg	atttgagcta	ttgttctaag	ttacctgta	1200
agtataaacc	ttggggagaat	ctaagtaaac	atattttctaa	aagcatagtt	acc	1253

<210> 636
 <211> 1944
 <212> DNA
 <213> Homo sapiens

<400> 636						
atggattcta	tactgattcc	tccacttact	aagaggttga	aaatgggcaa	gtcactttac	60
ctctctgtgc	cgcagtttcc	tgcttgtaac	acctacagct	gctccctgaa	cctcagagat	120
gccaatgagg	cggatacagg	gacgtacttc	tttcaggtgg	agagaggtta	ttacatgaaa	180
tacagttagc	gaaatgagaa	gttggtcttg	catgtgacaa	ggcctcctct	aagtcttgag	240
cccgcagttc	ctgagagaag	aaccctgagg	aacagacgtt	ccctcgcggc	cctggcacct	300
ctaaccaccg	acatgctgct	gctgctgctg	cccctgctct	gggggagggg	gagggcggaa	360
ggacagacaa	gtaaacgtct	gacgatgcag	agttccgtga	cgggtgcagg	aggcctgtgt	420
gtccatgtgc	cctgctcctt	ctcctacccc	tcgcatggct	ggattttacc	tggcccagta	480
gttcatggct	actggttccg	ggaagggggc	aatacagacc	aggatgctcc	agtggccaca	540
aacaaccacg	ctcgggcag	gtgggaggag	actcgggacc	gattccacct	ccttggggac	600
ccacataccg	agaattgcac	cctgagcatc	agagatgcca	gaagaagtga	tgcggggaga	660
tacttctttc	gtatggagaa	aggaagtata	aaatggaatt	ataaacatca	ccgctctct	720
gtgaatgtga	cagccttgac	ccacaggccc	aacatcctca	tcccaggcac	cctggagtcc	780
ggctgcccc	agaatctgac	ctgctctgtg	ccctgggcct	gtgagcagg	gacaccccct	840

atgatctcct	ggatagggac	ctccgtgtcc	ccctggacc	cctccaccac	ccgctcctcg	900
gtgctcacc	tcateccaca	gccccaggac	catggcacca	gcctcacctg	tcaggtgacc	960
ttccttgagg	ccagcgtgac	cacgaacaag	accgtccatc	tcaacgtgtc	ctaccgcct	1020
cagaacttga	ccatgactgt	cttccaagga	gacggcacag	tatccacagt	cttgggaaat	1080
ggctcatctc	tgctactccc	agagggccag	tctctgcgcc	tggtctgtgc	agttgatgca	1140
gttgacagca	atccccctgc	caggctgagc	ctgagctgga	gaggcctgac	cctgtgcccc	1200
tcacagccct	caaaccgggg	ggtgctggag	ctgccttggg	tgacacctgag	ggatgaagat	1260
gaattcacct	gcagagctca	gaaccctctc	ggctctcagc	aggtctacct	gaacgtctcc	1320
ctgcagagca	aagccacatc	aggagtgact	cagggggcgg	tcgggggagc	tggaaccaca	1380
gccctgggtct	tcctgtcctt	ctgcgtcatc	ttcgtttag	tgaggtcctg	caggaagaaa	1440
tcggcaaggc	cagcagcggg	cgtgggagat	acgggcatag	aggatgcaaa	cgctgtcagg	1500
ggttcagcct	ctcagggggc	cctgactgaa	ccttgggcag	aagacagtcc	cccagaccag	1560
cctccccag	cttctgcccc	ctcctcagtg	ggggaaggag	agctccagta	tgcatccctc	1620
agcttccaga	ttgtgaagcc	ttgggactcg	cggggacagg	aggccactga	caccgagtac	1680
tcggagatca	agatccacag	atgagaaact	gcagagactc	accctgattg	aggatcaca	1740
gcccctccag	gcaagggaga	agtcagaggc	tgattcttgt	agaattaaca	gccctcaacg	1800
tgatgagcta	tgataaacct	atgaattatg	tgagagtgta	aaagcacaca	ggcttttagag	1860
tcaaagtatc	tcaaacctga	atccacactg	tgccctccct	tttatttttt	taactaaaag	1920
acagacaaat	tcctaaaaaa	aaaa				1944

<210> 637

<211> 792

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(792)

<223> n = a,t,c or g

<400> 637

ctgatctaga	taatttatgt	gtatacaagg	ttcattaaaa	atagtttctt	ataatttttc	60
cctgatgaca	aaagcnnnnn	nnnnnttttt	cctgaattga	tacattttca	gattaatatt	120
atgaatctca	cttataattt	atgaaaaatt	ctaagggtatt	aatatatacg	gaaagaacag	180
tagtttgatt	tgaccaattt	tctaaccatc	gaaataaaca	cttcaataaa	aatattagaa	240
taaaatata	gtactgccaa	atggaaaagt	aattcatttt	cttaacttat	aatatatata	300
gacagagatg	aagaaaatgt	gataattaca	aaaaagatga	tgaggaaacg	cagtgactgt	360
ctgtaaaacc	aactttttat	tcacacctta	gcacatgct	gaagcccact	gaatgtaaag	420
gaaatacttt	tcccatgtgt	atccatattt	ctcaagtaaa	ctgaggagtc	cgtatattat	480
cgacttcagt	ctgtgtacat	ctaaaggggg	ctactcttgg	cttacaagtc	aatttttaag	540
atacctgggg	ctttgccttc	tttaacagcc	cttttgctca	gaatgttcta	tgctgtttgg	600
gcttgccctg	caattgatcc	tcgatttgaa	actgacaact	gtgaaccagc	gagaaagtga	660
tgtggcaaga	gttgccacgg	ctgaagaata	ttcaaagaaa	ggtctgcttg	gacaggaaac	720
acttcatgct	ggatcacaga	caagaatgca	gattcttatc	tcctgagacc	ccttgaattc	780
caccgcaagt	gg					792

<210> 638

<211> 796

<212> DNA

<213> Homo sapiens

<400> 638

aattctccct	aaagttcaga	aaataacata	atttggctta	tttgggtacaa	aatcatata	60
ggaagcattg	tcaaatatga	aatgggtgtg	ggtttttgag	ggctgcattt	ttaaaatatg	120
ttattagtat	gtgttccaaa	attatgggaa	attcctataa	ttctatataa	ctcagtgtac	180
attatcagta	ataatcataa	ttgttatgtt	aaaattattg	tgtgccgcag	aggtaacaaa	240
tgtccctttc	aactgtgttt	ttgactatgg	ctgtccataa	actttttgtc	atccatggac	300
aattttttgtc	ttgttttggg	cctcttttaga	agggtggctt	ataatcagct	acaaaactct	360

aacaggtgct	cttgaatgca	ggtttctgat	aactttggag	attgtgacat	cagaatagag	420
gaaaactttc	aggactcatg	gagagctata	aaatatccat	gagtatcaag	cagaacagga	480
attaactgca	tggactgaac	tgatcttttt	gactttttgc	ttaaaaagtt	gctgatcttt	540
tgttttgggt	ttcagagcct	tacaactttt	cttttgagct	attggcagct	tttaacaatt	600
tacgatactt	ccataaacia	agcttgcagc	ctatttcggg	tctcttttagc	tgattcctgc	660
cgaataggca	cactatctgc	tcgcactccc	tacctatcgg	ccctccggca	atacccacc	720
cgcgccacc	aatcctgtct	tcctcgatac	ctagaccctt	tcgtggcgca	ctccgttctc	780
tgaccaccag	tcgggg					796

<210> 639

<211> 958

<212> DNA

<213> Homo sapiens

<400> 639

tgctgtatg	tctgaggctg	ggtttgaagc	ctccagcggt	tttggagtta	atccccatta	60
ggttggactc	cgcccccttc	tcccaaaggt	aaagcaaggt	tttcaggcat	cactgcaaag	120
ggcagctagt	attcccatcc	ttgtctaaca	agctgtaagg	agaagtgtgt	tctgagatct	180
gagcctgaag	agagggaaca	agtcagtcag	ccttcgtggg	cagaagagaa	acctgtgacc	240
atgaggagca	gcctgacat	gggtgggaacc	ctctgggcct	tcctgtccct	tggtactgct	300
gtgaccagtt	ctaccagtta	cttctacat	tactggctct	ttggatccca	gatggggaag	360
ccagtgtcat	tcagcacatt	ccggagggtgc	aactaccctg	tgccgggaga	gggacacagt	420
ctgatcatgg	tggaagaatg	tgggcgctat	gccagcttca	atgccatccc	aagcctggcc	480
tggcagatgt	gcacagtggg	gacaggtgcc	ggctgtgctc	tgctgtcctc	ggtggcacta	540
gctgctgtcc	tgggttgctg	catggaggag	ctcatctcca	gaatgatggg	acgttgcatg	600
ggagcagcgc	agtttgttgg	agggctgctg	ataagctcag	gctgtgcctt	atacccttta	660
ggatggaata	gcccggagat	aatgcaaaca	tgtgggaatg	tctccaatca	atttcagtta	720
ggtaacctgtc	ggcttggtg	ggcctattac	tgtgctggag	gtggagcagc	tcagccatg	780
ttgatctgca	cctggctctc	ttgctttgct	ggaagaaacc	ccaagcctgt	catattgggg	840
gggaagcacc	atgaggaaaa	ccacttctta	tgctatggag	cttggccatt	gccctcaacc	900
cttgagcttc	gaaaagaaga	ccgggggggg	cgggcaacag	ggaagcaagt	gaccccc	958

<210> 640

<211> 958

<212> DNA

<213> Homo sapiens

<400> 640

tgctgtatg	tctgaggctg	ggtttgaagc	ctccagcggt	tttggagtta	atccccatta	60
ggttggactc	cgcccccttc	tcccaaaggt	aaagcaaggt	tttcaggcat	cactgcaaag	120
ggcagctagt	attcccatcc	ttgtctaaca	agctgtaagg	agaagtgtgt	tctgagatct	180
gagcctgaag	agagggaaca	agtcagtcag	ccttcgtggg	cagaagagaa	acctgtgacc	240
atgaggagca	gcctgacat	gggtgggaacc	ctctgggcct	tcctgtccct	tggtactgct	300
gtgaccagtt	ctaccagtta	cttctacat	tactggctct	ttggatccca	gatggggaag	360
ccagtgtcat	tcagcacatt	ccggagggtgc	aactaccctg	tgccgggaga	gggacacagt	420
ctgatcatgg	tggaagaatg	tgggcgctat	gccagcttca	atgccatccc	aagcctggcc	480
tggcagatgt	gcacagtggg	gacaggtgcc	ggctgtgctc	tgctgtcctc	ggtggcacta	540
gctgctgtcc	tgggttgctg	catggaggag	ctcatctcca	gaatgatggg	acgttgcatg	600
ggagcagcgc	agtttgttgg	agggctgctg	ataagctcag	gctgtgcctt	atacccttta	660
ggatggaata	gcccggagat	aatgcaaaca	tgtgggaatg	tctccaatca	atttcagtta	720
ggtaacctgtc	ggcttggtg	ggcctattac	tgtgctggag	gtggagcagc	tcagccatg	780
ttgatctgca	cctggctctc	ttgctttgct	ggaagaaacc	ccaagcctgt	catattgggg	840
gggaagcacc	atgaggaaaa	ccacttctta	tgctatggag	cttggccatt	gccctcaacc	900
cttgagcttc	gaaaagaaga	ccgggggggg	cgggcaacag	ggaagcaagt	gaccccc	958

<210> 641

<211> 1710
<212> DNA
<213> Homo sapiens

<400> 641
tttcgtcagg gctggaaggt cctggcctgg gatgaagagg ggactgccta aggctgggggt 60
ggctccaaga tgccggcatg ggaaactggg ggtttcctgg taactggact cctagcaaac 120
tcccaaggat tcaggatgtc gctgctgagc ctgccctggc tgggcctcag accggtggca 180
atgtccccat ggctactcct gctgctgggt gtgggctcct ggctactcgc ccgcatcctg 240
gcttggacct atgccttcta taacaactgc cgccggctcc agtgtttccc acagccccc 300
aaacggaact ggttttgggg tcacctgggc ctgatcactc ctacagagga gggcttgaag 360
gactcgaccc agatgtcggc cacctattcc cagggttcta cggtatggct ggggtccatc 420
atccccctca tcgttttatg ccacctgac accatccggg ctatcaccaa tgcctcagct 480
gccattgcac ccaaggataa tctcttcac aggttctga agccctggct gggagaaggg 540
atactgctga gtggcgggtga caagtggagc cgccaccgtc ggatgctgac gcccgcttc 600
catttcaaca tcctgaagtc ctatataacg atcttcaaca agagtgc aaa catcatgctt 660
gacaagtggc agcacctggc ctacagaggc agcagttgtc tggacatgtt tgagcacatc 720
agcctcatga ccttggacag tctacagaaa tgcattctta gctttgacag ccattgtcag 780
gagaggccca gtgaatatat tgccaccatc ttggagctca gtgcccttgt agagaaaaga 840
agccagcata tcctccagca catggacttt ctgtattacc tctcccatga cgggcggcgc 900
ttccacaggg cctgccgcct ggtgcatgac ttcacagacg ctgtcatccg ggagcggcgt 960
cgcacctcc ccactcaggg tattgatgat tttttcaaag acaaagccaa gtccaagact 1020
ttggatttca ttgatgtgct tctgctgagc aaggatgaag atgggaaggg attgtcagat 1080
gaggatataa gagcagaggc tgacaccttc atgtttggag gccatgacac caccggccagt 1140
ggcctctcct gggctcctgta caaccttgcg aggcacccag aataccagga gcgctgccga 1200
caggaggtgc aagagcttct gaaggaccgc gatcctaaag agattgaatg ggacgacctg 1260
gcccagctgc ccttctgac catgtgcgtg aaggagagcc tgagggtaca tccccagct 1320
cccttcatct ccgatgctg caccagagc attgttctcc cagatggccg agtcatcccc 1380
aaaggcatta cctgcctcat cgatattata ggggtccatc acaaccaaac tgtgtggccg 1440
gatcctgagg tctacgacct ctccgccttt gaccagaga acagcaaggg gaggtcacct 1500
ctggcttcta tctcttctc cgcagggcc aggaactgca tcgggcaggc gttcggccatg 1560
gcggagatga aagtggctct ggcgttgatg ctgctgcact tccggttct gccagaccac 1620
actgagcccc gcaggaagct ggaattgatc atgcgcgcgc agggcgggct ttggctgcgg 1680
gtggagcccc tgaatgtaag cttgcagtga 1710

<210> 642
<211> 1710
<212> DNA
<213> Homo sapiens

<400> 642
tttcgtcagg gctggaaggt cctggcctgg gatgaagagg ggactgccta aggctgggggt 60
ggctccaaga tgccggcatg ggaaactggg ggtttcctgg taactggact cctagcaaac 120
tcccaaggat tcaggatgtc gctgctgagc ctgccctggc tgggcctcag accggtggca 180
atgtccccat ggctactcct gctgctgggt gtgggctcct ggctactcgc ccgcatcctg 240
gcttggacct atgccttcta taacaactgc cgccggctcc agtgtttccc acagccccc 300
aaacggaact ggttttgggg tcacctgggc ctgatcactc ctacagagga gggcttgaag 360
gactcgaccc agatgtcggc cacctattcc cagggttcta cggtatggct ggggtccatc 420
atccccctca tcgttttatg ccacctgac accatccggg ctatcaccaa tgcctcagct 480
gccattgcac ccaaggataa tctcttcac aggttctga agccctggct gggagaaggg 540
atactgctga gtggcgggtga caagtggagc cgccaccgtc ggatgctgac gcccgcttc 600
catttcaaca tcctgaagtc ctatataacg atcttcaaca agagtgc aaa catcatgctt 660
gacaagtggc agcacctggc ctacagaggc agcagttgtc tggacatgtt tgagcacatc 720
agcctcatga ccttggacag tctacagaaa tgcattctta gctttgacag ccattgtcag 780
gagaggccca gtgaatatat tgccaccatc ttggagctca gtgcccttgt agagaaaaga 840
agccagcata tcctccagca catggacttt ctgtattacc tctcccatga cgggcggcgc 900
ttccacaggg cctgccgcct ggtgcatgac ttcacagacg ctgtcatccg ggagcggcgt 960
cgcacctcc ccactcaggg tattgatgat tttttcaaag acaaagccaa gtccaagact 1020
ttggatttca ttgatgtgct tctgctgagc aaggatgaag atgggaaggg attgtcagat 1080
gaggatataa gagcagaggc tgacaccttc atgtttggag gccatgacac caccggccagt 1140

ggcctctcct	gggtcctgta	caaccttgcg	aggcaccag	aataccagga	gcgctgccga	1200
caggaggtgc	aagagcttct	gaaggaccgc	gacccctaaag	agattgaatg	ggacgacctg	1260
gcccagctgc	ccttctctgac	catgtgcgtg	aaggagagcc	tgaggttaca	tccccagct	1320
cccttcatct	cccgatgctg	caccagggac	attgttctcc	cagatggccg	agtcaccccc	1380
aaaggcatta	cctgectcat	cgatattata	ggggtccatc	acaacccaac	tgtgtggccg	1440
gatcctgagg	tctacgaccc	cttccgcttt	gacccagaga	acagcaaggg	gaggtcacct	1500
ctggctttta	ttcctttctc	cgcagggccc	aggaactgca	tcgggcaggc	gttcgccatg	1560
gcggagatga	aagtggctct	ggcgttgatg	ctgctgcact	tccggttccct	gccagaccac	1620
actgagcccc	gcaggaagct	ggaattgatc	atgcgcgcgc	agggcgggct	ttggctgcgg	1680
gtggagcccc	tgaatgtaag	cttgcaagtga				1710

<210> 643
 <211> 1710
 <212> DNA
 <213> Homo sapiens

<400> 643						
tttctgcagg	gctggaaggt	cctggcctgg	gatgaagagg	ggactgccta	aggctggggg	60
ggctccaaga	tgccggcatg	ggaaactggg	ggtttctctg	taactggact	cctagcaaac	120
tcccaaggat	tcaggatgtc	gctgctgagc	ctgccctggc	tgggcctcag	accggtggca	180
atgtccccat	ggctactcct	gctgctgggt	gtgggctcct	ggctactcgc	ccgcatcctg	240
gcttggacct	atgccttcta	taacaactgc	cgcggctccc	agtgtttccc	acagccccc	300
aaacggaact	ggttttgggg	tcacctgggc	ctgatactc	ctacagagga	gggcttgaag	360
gactcgaccc	agatgtcggc	cacctattcc	cagggttcta	cggtatggct	gggtcccatc	420
atcccccctca	tcgttttatg	ccacctgac	accatccggg	ctatcaccaa	tgctcagct	480
gccattgcac	ccaaggataa	tctcttcac	aggttctctga	agccctggct	gggagaaggg	540
atactgctga	gtggcgggtga	caagtggagc	cgccaccgtc	ggatgctgac	gccgccttc	600
catttcaaca	tcctgaagtc	ctatataacg	atcttcaaca	agagtgcaca	catcatgctt	660
gacaagtggc	agcacctggc	ctcagagggc	agcagttgtc	tggacatggt	tgagcacatc	720
agcctcatga	ccttggacag	tctacagaaa	tgcatcttca	gctttgacag	ccattgtcag	780
gagaggccca	gtgaatatat	tgccaccatc	ttggagctca	gtgcccttgt	agagaaaaga	840
agccagcata	tcctccagca	catggacttt	ctgtattacc	tctcccatga	cgggcggcgc	900
ttccacaggg	cctgccgcct	gggtcatgac	ttcacagacg	ctgtcatccg	ggagcggcgt	960
cgcaccctcc	ccactcaggg	tattgatgat	tttttcaaag	acaaagccaa	gtccaagact	1020
ttggatttca	ttgatgtgct	tctgctgagc	aaggatgaag	atgggaaggc	attgtcagat	1080
gaggatataa	gagcagaggc	tgacaccttc	atgtttggag	gccatgacac	cacggccagt	1140
ggcctctcct	gggtcctgta	caaccttgcg	aggcaccag	aataccagga	gcgctgccga	1200
caggaggtgc	aagagcttct	gaaggaccgc	gacccctaaag	agattgaatg	ggacgacctg	1260
gcccagctgc	ccttctctgac	catgtgcgtg	aaggagagcc	tgaggttaca	tccccagct	1320
cccttcatct	cccgatgctg	caccagggac	attgttctcc	cagatggccg	agtcaccccc	1380
aaaggcatta	cctgcctcat	cgatattata	ggggtccatc	acaacccaac	tgtgtggccg	1440
gatcctgagg	tctacgaccc	cttccgcttt	gacccagaga	acagcaaggg	gaggtcacct	1500
ctggctttta	ttcctttctc	cgcagggccc	aggaactgca	tcgggcaggc	gttcgccatg	1560
gcggagatga	aagtggctct	ggcgttgatg	ctgctgcact	tccggttccct	gccagaccac	1620
actgagcccc	gcaggaagct	ggaattgatc	atgcgcgcgc	agggcgggct	ttggctgcgg	1680
gtggagcccc	tgaatgtaag	cttgcaagtga				1710

<210> 644
 <211> 886
 <212> DNA
 <213> Homo sapiens

<400> 644						
tttttttttc	acaagggaca	tcagcagaaa	caccaatgtc	tgcactccca	gccccacaag	60
caccttttgc	agagaaaaa	agtgaaggtc	ctgggtttta	tttgaagcca	gaggggaagg	120
cgttgactcc	cacccaggcc	cgagtgcctc	gaggctggag	gagggaggca	ggatggcagc	180
acagagcaag	ggcttctctg	cctcctggct	gcctgcagac	gggagtgagg	accgtcagag	240
caagcccccag	cttctttcag	aggagggtag	agtccaggac	tagagctctt	ctcttgtggc	300

tgcacaccttc	tctgagcagg	ccccctgggg	gtccccccaca	tagcaatgcc	tccagagccc	360
ctcggccttg	ttgggtgggt	tcatagatct	ggtcttctcc	aaactccccc	aagtagtgca	420
aacatgtcct	ggagagcctg	gtatgccagg	ggccccctgt	gaccatcacg	ctgatgcttg	480
gctctggccc	ctcgctaagt	cctggggcctg	tgagacgttt	cacttggtcc	acttctcgaa	540
ctccgtagtc	ctgccagttc	cgggagcagc	tccgggtccag	gacatccgtg	tagaccaact	600
cgtcacgtc	ccgccgcccc	ccagagtttg	aggtatgaag	tttgggtctct	gcctttgcca	660
agggtttttg	cccacattct	tggttaagcca	cagctctgca	ggcatcacag	cgcaggtgag	720
cgggcatgtg	ggctgagtac	atctcctcat	catccacctc	cggggctgtg	gctgtgagtg	780
gcgccataac	cccagagccc	cctgggatgg	cccaggtccc	cagcagcagc	agcagcagtg	840
gcagtgcagc	cctcatggcc	ccaggagcca	gttcagcaag	tggtcg		886

<210> 645

<211> 1832

<212> DNA

<213> Homo sapiens

<400> 645

tttcgtatta	cgtgtgctgc	cctttgagaa	gtttgttgat	gaaaggagaa	aggaaatagt	60
agcaccagag	gaaaagagca	gggattttacc	ctgttctttac	aggataaacag	ctccttgctc	120
ttttcagcta	gcttttcaaa	ggacagggat	aggacagccc	cctgccttat	ttcggatact	180
tggtatctata	acctccagaa	attcaagctg	aagtagctgg	aggtcggaga	ggaatgagaa	240
ctgcctgggt	ggggtctgcc	agccagacac	tgccaggata	gccacaagga	gacaaacttg	300
aagaacagac	agcaaccacg	ttggactcag	gcagtcctgg	gtttgaatcc	tgtctctgtc	360
accacctagc	ctgatgacct	tgggcacatc	ctgagcacc	tgtgccttat	ctgtaaaatg	420
gaaacaatca	tgccgacctt	tcagggtgg	tttggaggatt	agagactagc	tcctgacaca	480
cagtaggtaac	tcgtaaaatgg	gtgctattat	ttggcccgac	ccacgttata	ggacagaacg	540
tctaacggat	gcgtcagaac	ctgcgcctc	cggatcttgg	agggtacaga	gggcgcccct	600
cggcctcctc	ccttttcggag	gtggggacaa	ggtggaggaa	gggctgcagg	aggaggagct	660
ctagcatcgc	gaccgcgccc	gtcccgcca	gtctggcctg	ggcgccgcgg	gaacgctgtc	720
ctggctgccc	ccaccggaac	agcctgtcct	ggtgccccgg	ctccctgccc	cgcgcccagt	780
catgacctg	cgccccctcac	tcctcccgt	ccatctgctg	ctgctgctgc	tgtcagtg	840
ggcggtgtgc	cgggctgagg	ctgggctcga	aaccgaaagt	cccgtccgga	ccctccaagt	900
ggagaccctg	gtggagcccc	cagaacatg	tgccgagccc	gctgcttttg	gagacacgct	960
tcacatacac	tacacgggaa	gcttggtaga	tggaagctatt	attgacacct	ccctgaccag	1020
agaccctctg	gttatagaac	ttggccaaa	gcagggtgatt	ccagggtctgg	agcagagtct	1080
tctcgacatg	tgtgtgggag	agaagcgaag	ggcaatcatt	ccttctcact	tggcctatgg	1140
aaaacgggga	tttccaccat	ctgtcccagg	gactaaagac	aacctgatga	ggccacctgg	1200
catgacctcc	agcagccagt	aacttgtag	ggaagagacc	tgcttgggce	acatgggtct	1260
gctgctgtg	ccaccacctt	tcccagaaca	ctggacttct	ttcctgacct	tttctacaac	1320
tctacgtgtg	gtcagctgta	cagccacccc	cccaccctt	cctttcagcc	tccatcaggg	1380
aagagacagt	aaaaataatc	acagtcaagt	gattcaaaac	aaaacaaaaa	gcaactgtta	1440
aagccaagtc	tgccccataa	ctttaaaagc	catcattgg	cactgcccag	gtctattttt	1500
gaagggttga	gatggacaga	tttcccaaga	tgcatatctt	ttgctttcag	ttctaacaaa	1560
tgttctatta	gctaaaatgt	gttgactccc	acagagtatt	gggctcgtaa	ttcttctttt	1620
tttttttttag	aaagggagtt	ccatttttgt	tgcccaggct	ggagggcttt	aggggaatttt	1680
taatttacc	aagcctccgc	cacccgggtt	aaagcatttt	tcttgtctaa	ccttcccagg	1740
tagttggaat	tacaggcatg	ccccacccca	accgtttatt	tttatacttt	tagtaaaaaa	1800
ggggccttttc	catgttggcc	agcctgctct	ca			1832

<210> 646

<211> 2393

<212> DNA

<213> Homo sapiens

<400> 646

gaccaaggag	gcgcccgcgg	ctgcagagct	gcagagcggg	atctcttcga	gctgtctgtg	60
tccgggcagc	cggcgcgcaa	ctgagccaga	ggacagcgca	tcctttcggc	gcgggcccgc	120
agggccctg	cggtcggcaa	gctggctccc	cgggtggcca	ccgggacccc	cgagcccaat	180

ggcggggg	cgacacact	gtagagatca	ccccacctc	caacggacag	240
gtcgggaccc	gggtgcccacg	gagcagctgc	aggggtgagcg	ggagcgcgag	300
cgggagggg	gggaggagcgc	ggactgggca	gcagcctgtc	gctggccgtg	360
ccccagggc	ccctcagctt	tgaggcgctg	ctcgcccagg	tggggcgct	420
cagcagctgc	agctcggcct	ctgctgcctg	cgggtgctct	tcgtggctct	480
tcggacccca	tcttcacgct	ggcgcccccg	ctgcattgcc	actacggggc	540
aatgcctctg	gctgggagca	gcctcccaat	gccagcgggc	tcagcgctgc	600
ctagcagcca	gcgcgcgag	ccgtgtcgcc	accaagtacc	gacccctcg	660
tcgccccgcc	ggacttcaac	cattgccctc	aaggattggg	actataatgg	720
ctcaccacca	acgccatcgg	ccagtgggat	ctggtgtgtg	acctgggctg	780
ctggagcaga	tctcttcat	cttgggcttt	gcctccggct	acctgttcc	840
gcagacagat	tgggcccgtc	cgggattgtg	ctgctgacct	tggggctgg	900
ggagtaggag	gggctgtctc	aggctcctcc	acaggcgctca	tggccctccg	960
ggctttctgc	tggccggtgt	tgacctgggt	gtctacctga	tgcgctgga	1020
ccaaccaga	ggcttcgggt	ggcctggca	ggggagtgg	tgggggtgg	1080
ctgttccctg	gcctggccct	tgtctctaag	gattggcgat	tcctacagcg	1140
gtccctgca	tctcttcc	gttttatggc	tggcctggtt	tgttccctgga	1200
tggctgatag	tgaagcgga	gattgaggag	gctcagctg	tgctgaggat	1260
cgaaaccggc	cccatgggca	gatgctgggg	gaggaggccc	aggaggccct	1320
gagaatacct	gccctctccc	tgcaacatcc	tccttttcc	ttgcttccct	1380
cgcaacatct	ggaaaaatct	gcttatcctg	ggcttcacca	acttcattgc	1440
cgcactgct	accagcctgt	gggaggagga	gggagcccat	cggacttcta	1500
ctgctggcca	gcggcaccgc	agccctggcc	tgtgtcttcc	tgggggtcac	1560
tttgccgcc	ggggcatcct	tcttctctcc	atgacctta	ccggcattgc	1620
ctgctgggcc	tgtgggatta	tctgaacgag	gctgccatca	ccactttctc	1680
ctcttctcct	cccaagctgc	cgccatcctc	agcacctcc	ttgctgctga	1740
accactgtcc	ggggccgtgg	cctgggcctg	atcatggctc	taggggcgct	1800
agcggcccgc	cccagcgcc	ccacatgggc	catggagcct	tcctgcagca	1860
gcgccctgcg	ccctcctctg	cattctcagc	attatgctgc	tgccggagac	1920
ctcctgcccc	agggtgctcg	ggacggggag	ctgtgtcgcc	ggccttccct	1980
ccacccctca	cccgctgtga	ccacgtccc	ctgcttgcca	cccccaacc	2040
gcggcctctg	agtaccctgg	cgggaggctg	gcccacacag	aaagggtggca	2100
gaagactgag	tagggaaggc	agggctgccc	agaagtctca	gaggcacctc	2160
tcggggagag	ctcagagggc	cgtccccacc	ctgcctctc	cctgctgctt	2220
tccttggcca	gagtcagggg	acagggagag	agctccacac	tgtaacact	2280
tccatcctgc	gcccacagac	atccaccag	acctcattat	ttcttgctct	2340
ttcaataaag	acatttgga	ttaacgagca	tatcatagcc	tggaaaaaaa	2393

<210> 647

<211> 378

<212> DNA

<213> Homo sapiens

<400> 647

acttttttat	ttatggaata	acagatttgc	tggcattcac	tgaagagtgc	caaattattcg	60
gtccttgtga	cttccactga	ctcttccaaa	ttttatgaat	gtatcagtgt	gttgataaa	120
cccagtttca	gaatggtgaa	gaggaaatct	tggaccaa	ggtgcggctg	gttgacgggtg	180
gtacgatttc	tggcccgctg	gtttgaaatg	cacttaaa	cctgttctcg	ccttttattt	240
tctgaacttg	ccgcttttgc	attctttgag	ttcagtttaa	agacggttac	tttgagggcg	300
ttttgaaccc	tcgggctaga	ggtcggacca	ctgttggtcg	gccgcattgt	ttggtctaac	360
gttttttctt	ttattggtt					378

<210> 648

<211> 636

<212> DNA

<213> Homo sapiens

<400> 648

ggtcgaccca	cgcgctccgca	ctgtgtgcac	aagagagcga	taagcactct	ggatcattta	60
aaggaaaagg	agatgcgact	cctaccttca	gaagggtata	atggacttat	tataatggac	120
ttattatacg	gacaacaaaa	tgaacagtta	cacacatgca	aagctacagc	agtacaagat	180
agtatgtcat	gagtgtgtgt	cttaatgaaa	cagatcatat	atctgctgta	tgtaggggctc	240
tgttcaattc	tcacagcatt	cttatttact	cctcaccatg	tccttgagag	gtatagggtat	300
tattgtccctg	attttagaga	gattaagaaa	cttgggtcaag	gctatacaac	taattagtag	360
aagaattaaa	attcaatcct	aagtctgtct	gaccccaaag	cccatgaata	ctcttaactc	420
ctatgctgta	aatataaaaa	gactgaacgg	gggccagacg	tggtgggtca	tgctgtgaat	480
cccagcactt	tgggaggatg	gtttgagccc	aggagttcaa	gaccagcctg	ggcactatag	540
tgagaccctg	tctccattca	aaaaaaaaaa	aaaggggggg	cctcttaaaa	ggctcaattt	600
tacttaccgc	gtgctgcaaa	gttaaatgtt	tttatac			636

<210> 649
 <211> 636
 <212> DNA
 <213> Homo sapiens

<400> 649						
ccgggtcgac	ccacgcgtcc	ggtagaataa	tatttgtttg	ttttttgcaa	tgtacaaatt	60
aagggcatga	atcctggagc	caaactaact	gagttccaaa	tcctgatgct	gccccatatt	120
aattctgtga	attcgggcaa	atgacttagt	ttgtctaaac	ctcaattatc	tcactataaa	180
aaggcagcta	gatcttaact	cactgggttc	tcgtgaggat	taaatgagat	agtggcccta	240
aggtttctgg	tatgaaggag	gcactcctta	aatgttcgag	acttgccaga	gggcttcttc	300
tctgtctgga	ctgtgctaata	gaccacagat	ccccgggtga	gaggaatgcc	cagaccacac	360
tcctcctaca	ctcatcccta	tactcattgt	cccttgggaa	ccaactgcag	ggaggagggg	420
aaatggccac	cactggaggg	agtactcagc	aggccaagac	ttatggggga	ctcttccaaa	480
ttggggccat	ggaaccggca	ctatttctac	tctttatttt	ccttttggca	tccttttggg	540
ttcaccgagc	tatagaataa	cctacggaga	cgaatttagc	aaatacatca	ctgaagcttc	600
tccctcggaa	gttggaccca	agccatgtga	atgggc			636

<210> 650
 <211> 619
 <212> DNA
 <213> Homo sapiens

<400> 650						
tttttcccaa	taattacttc	aactcacagt	tagttaaaagc	ataacatgtt	ggaaactttc	60
ttgtttaaac	tcttcctatt	cttcacctta	ttggttaatt	tatttattac	caatgaccaa	120
ctcagtgtyg	gtagtatttt	tctcagcttc	cagctcccag	ctttctttct	tgatatggct	180
gaattttgag	atactcaaag	caagcagacc	ataaagagag	acagataaaa	ctggacctgg	240
gtgttcataa	gtgtatgtgt	gattgtgtgt	tggaggggta	ttatcccttt	ttaaagaact	300
acttatagga	tggtggcagg	acctttgaaa	ttgcaggctg	aattgattat	tagcatatgt	360
aaatttgggt	aagttattaa	gcaactttca	aagtgttttt	gtttctctct	ctgtaaaagt	420
aggatgataa	taatatctaa	tgatcttggt	gtagattaaa	tgatgaaaag	caccttacac	480
agttagtggt	acgtagtaag	tagacaataa	atggtaacat	gactattatc	atcatgttgc	540
tgctatcgtg	gatatttgca	tcttatagct	ttggcagact	gaaaacttcc	ttttgctgtg	600
aatatcttgg	atagacgca					619

<210> 651
 <211> 378
 <212> DNA
 <213> Homo sapiens

<400> 651						
tgaacttggg	gtgttgattc	agcatcactt	gccatgacct	ccaagccctc	ctctcagctt	60

tctctccatg	acttttctct	tacacgttct	ggtagacagct	ctgtccctctc	attccactgg	120
gcgtaggggt	actaactgct	tcattgttact	ttcctcaggg	aatcatccta	tccttctgtg	180
ttccctgaca	ccctacccac	acctttgaaa	atggtgcctt	tattacatac	tcctcgggtc	240
tccccctact	aaagtgggcc	gtctctttcc	tggtgaagca	ttgactgata	cactggcgaa	300
agggaaacacc	ctgcctgccc	ttcacccctt	cccaagagcc	ttaaagagact	tctgagcttc	360
aggaagaatc	tgccgtga					378

<210> 652
 <211> 400
 <212> DNA
 <213> Homo sapiens

<400> 652						
ctcaaatatt	ctatagactg	tttaaatata	aaccaaacta	aactatttta	gttccaggat	60
attagtgaat	ttttacctga	gatacttgct	cagatttatct	atctgttctg	aactccattt	120
taaaagcacc	tactataacc	atgcttgaag	tcaggtagtc	tgtagacttc	atcacagccc	180
ctttatatat	aattacttct	ctcacggagg	agtaggtgtg	atttacctgt	atctttgaat	240
ggcttaagat	tagcatgctt	cagctatgtt	cttgctccta	tcaaagtga	acctgggggt	300
ggctcagaga	cagtgacgg	gtttagaatc	ccagagagca	cacctcact	aaaggccggt	360
tactgcgacc	ataaacactt	cttgcccaca	attcatcttt			400

<210> 653
 <211> 581
 <212> DNA
 <213> Homo sapiens

<400> 653						
aatttgaagt	atattttaaag	tcaataagca	aacattcaaa	aacacttgta	tgactctcct	60
aaatctttat	tattttaaata	gttttctatt	gtactcgaaa	agatttgaag	gtatatcctt	120
ctgtgtccaa	aaggtcagta	taatattatg	tatacattat	cttcgtagca	caactatttg	180
gaataagctt	ttcttcagag	atgtatcggc	ataaaggagc	tctgatttgt	ttaaatattt	240
taaaagggtat	taaaatatat	tttcatttga	gaacctcccc	tataactca	ggaaagctca	300
ccttttcaaa	acctgagtgt	taactctttc	caaacgttct	gtaatgttta	tcaaaaacaa	360
aaaataatga	aaagagggtga	acattatttt	ggagagcctc	attgtcttca	tctactcaga	420
tcattccaaa	tcactggaga	ggaggcagaa	ttttgtcact	gggacagcag	tcacttggcc	480
cagaatcttc	tacagattcc	ctccaggag	cccttcccat	tggtcttttc	ctagaaattt	540
catgtttttg	gggttcctca	gtaaaacttt	gggcttaaca	c		581

<210> 654
 <211> 701
 <212> DNA
 <213> Homo sapiens

<400> 654						
gattggactt	atttcccaca	ttttttcaag	ctctggatat	taccacactt	ttcactattt	60
acctatcttg	aaaagcaa	atctttatat	ttaaattttt	ataacctcaa	tcattcagtga	120
aaacatttct	aattgtttata	tcacttgctt	gcaaactcatg	cattttcctg	tgaactgttt	180
cttcaagtca	ttacatat	ttcttttact	acagggtttt	cttgccactt	ttttgagaaa	240
aaaattaagt	aaggtagcct	tcagttgtct	tggtgaattt	ttctactatt	gttattattt	300
tttagacttt	gctagtagtg	tttctttttt	gttttgtttt	gttttgcctt	tgagacagag	360
tttactcttg	tcaccaggc	tgagtgacg	tgacacgac	ttggctcact	gcaaccttgc	420
cctccgggtg	tcacgctatt	cttctgcctc	aacctcccga	gtagctggga	ttacaggtgt	480
gcaccaccac	acctatgtaa	atthtgtatg	gacagtacag	aaggcgggtc	actgtgttgg	540
ccaggctagc	tggaactcc	tgacctcaag	ggatccaccc	accttggcct	cccacagggc	600
tgggattaca	ggcatgagcc	accgcacctg	ggcaaaagtg	ttccttaaaa	gagtgatttt	660

tctaaataga gaatacgatt tgactatggt ttgcttttta a

701

<210> 655
 <211> 628
 <212> DNA
 <213> Homo sapiens

<400> 655
 ttcgagcttc tcttcaatac ccatatgtat ctcaaagtaa tgtaatcagc aaattagcag 60
 tgtaaaaatg ctagataact tattctgaaa tccacttccg aaatcatttg agcagctaag 120
 ttgaaaaaac tcatgttggg accaacattt ctctcttttag tgtgtgattt ttcccttttt 180
 gtgcttctcc tcttggctg tctctccttt ctcttccccc ctcaacttacc ttgcacttcc 240
 ttccctctcc atctctggag gcttctctct ccttttataat cttttctgga cttactgctg 300
 cttcttagtt ataaaaatgaa ttgtataatt taaactgttt aataaatgta ctttgttatt 360
 tgtaattttc aagtcgggta ctaaaacctt tataaccttt accccctcc ttgaacctc 420
 taaaattaac aaaatcatgt taagttttat ataacaaggc cttgggatat acttttttgt 480
 tgaaattgct aggcataat gctcttaaca agtaattgcc tggggcagga ggattgcttg 540
 agcccaggaa tccgagtttg caaggagctg tgatcaccac tgcactttag cctggacaac 600
 agaaccagaa ccttgctcaa aaaaaaaa 628

<210> 656
 <211> 717
 <212> DNA
 <213> Homo sapiens

<400> 656
 ctccagctgc ctgctttttg ttgccatag ctggctctgt tacctctcat tttctccct 60
 ggaggcagtt atgttgctc tatttaagca ctccagctc agaactctcc tattctgctt 120
 aaatacccaa catttgcag taagaaataa ttttgtattt aattgtgtat ccccaggaat 180
 ttgcccatt tctcttggc ttgctttcaa tcatgataga agcacctttt tcttttcaat 240
 aatattattg ttaaaagcct taattatttt gtcttctctg ctcaaaacta agtaattctg 300
 acttcttaa tcttttatca caggctctgt tctccaaact ttcagtcttt tctgtgttc 360
 catattccat tggttctcc tctactcat tcagaggcaa attaagggtg ttttttaagt 420
 tttggttgt agactatgtc gttatgtgag aaatttactt taggtttgta ttgtcaacct 480
 catagcacia gccagggtact taatttaggc attagtcagt gatataagatt gaattttgt 540
 cctgcgcaa atctcatgtt gaattgcaat cccagtggtt ggggggtggc cttggtggaa 600
 ggcgaaggaa tcaaggcgac cggcggtccc caccctcgg gggcttttct taacggttgt 660
 ggaaattttg tgcccccccc cccaaaaaaa aggggtgggg aaacgtttcc ccccttt 717

<210> 657
 <211> 717
 <212> DNA
 <213> Homo sapiens

<400> 657
 gccttggttt gtaacaaatg tgaggactca aaggacacc cagcctacct ctctggtctc 60
 agcttttccc agtcatgagg agctcacttc tcccatgaag cccatcctgc tggctctcag 120
 ctctatcacc cgtgccctcc ttctgcagat atcaagtgtg tcttggcagt cctgcatgtg 180
 gagggcaatg cctgattgtc tccagactga ttacccata agccttggct ttcataaag 240
 aacaaggctt ctatagctc tctgccagt cactcaatgc catcactctg cctggccctg 300
 tgtttgccag ggagcacaga caccatctg aggaatccat gccatgagga gtttatggtc 360
 tgtgaagaat acaggcagga attgagaag gtgtcagact gcaggaaagg agctcactct 420
 gctgggttg atatctgagg cagagatctg ctggtatagg ggaccaactg gctaagtaag 480
 ttccccaag actcacgaa ttccacaac aggtgattta ggatctgaaa acctgacaat 540
 tatgggtaca catgaggggg gcagcctgca caatgttctc caggtgagga gactggtggt 600

tgagttgccc attggaaagg ggttgggtag ccctccgggt tttctttcca cacaccggga 660
 cttgggagct tccctggggg gggagcaagg gaattccctt ttcttgggcc ccgccc 717

<210> 658
 <211> 419
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)...(419)
 <223> n = a,t,c or g

<400> 658
 tttcncccc aatnnaaggt cgaccacgc gtccgccttt gggttatctt ctctattaag 60
 tgtggatccc tgaaaaatgg cataccctgg tggtttttct agcccttgct gaaatccttt 120
 gaaggaatgt acttatttgt caagattcgt ctaaaaatgt ggtctccaga aatgaacata 180
 gatgtgctgt gagtccttg cagttgtgat tgcgacctg ataattaaga ttggtttagt 240
 tgttctgttg tacttcatca aattgttgat tcacattgaa tttatcaaac gtcattctat 300
 tctaaatgt gaaagtattt ttaacttaaa tgtaggaatt cgcatgtatc caggacaagt 360
 aaatttttgt gaaacattgc agatgttaga tggatttggg agaattttcc aaactaagt 419

<210> 659
 <211> 3032
 <212> DNA
 <213> Homo sapiens

<400> 659
 tttcgtgcgg cggcggcgcg ggcgtcggcg tcggcgctgt ctacctcag cttctcctcc 60
 ctctcctcc gtctcctcct ctctcctcct atctgctgtg gttatggcct gtcgctggag 120
 cacaaaagag tctccgcggg ggaggtctgc gttgctcttg ctttctctcg ctggggtgta 180
 cggaaatggg gctcttgtag aacattctga aaatgtgcat atttcaggag tgtcaactgc 240
 ttgtggagag actccagagc aaatacgagc accaagtggc ataatacaca gcccaggctg 300
 gccttctgaa tatcctgcaa aaatcaactg tagctggttc ataagggcaa acccaggcga 360
 aatcattact ataagttttc aggattttga tattcaagga tccagaaggt gcaatttgga 420
 ctggttgaca atagaaacat acaagaatat tgaaagttac agagcttggt gttccacaat 480
 tccacctcgg tatatctctt cacaagacca catctggatt aggtttcatt cggatgacaa 540
 catctctaga aagggtttca gactggcata ttttccagg aaatctgagg aaccaaatg 600
 tgcttgtgat cagtttctgt gtggtaatgg aaagtgtata ccagaagcct ggaaatgcaa 660
 taacatggat gaatgtggag ataggtccga tgaagagatc tgtgccaaag aagcaaatcc 720
 tccaactgct gctgcttttc aaccctgtgc ttacaaccag ttccagtgtt tatcccgttt 780
 taccaaagtt tacacttgcc tccccgaatc tttaaaatgt gatgggaaca ttgactgcct 840
 tgacctagga gatgagatag actgtgatgt gccaacatgt gggcaatggc taaaatattt 900
 ttatggtact tttaattctc ccaattatcc agacttttat cctcctggaa gcaattgcac 960
 ctggtttaata gacactgggt atcaccttaa agtcatttta cgcttcactg actttaaaact 1020
 tgatggtact ggttatgggt attatgtcaa aatatatgat ggattagagg agaatccaca 1080
 caagcttttg cgtgtgttga cagcttttga ttctcatgca cctcttacag ttgtttcttc 1140
 ttctggacag ataagggtac atttttgtgc tgataaagt aatgctgcaa ggggatttaa 1200
 tgctacttac caagtagatg ggttctgttt gccatgggaa ataccctgtg gaggttaactg 1260
 ggggtgttat actgagcagc agcgttgtga tgggtattgg cattgcccaa atggaaggga 1320
 tgaaaccaat tgtaccatgt gccagaagga agaatttcca tgttcccgaa atggtgtctg 1380
 ttatcctcgt tctgatcgt gcaactacca gaatcattgc ccaaatggct cagatgaaaa 1440
 aaactgcttt ttttgccaac caggaaattt ccattgtaaa aacaatcggt gtgtgtttga 1500
 aagttgggtg tgtgattctc aagatgactg tggatgagg agcgatgaag aaaattgccc 1560
 agtaatcgtg cctacaagag tcatcactgc tgcgctcata gggagcctca tctgtggcct 1620
 gttactcgtc atagcattgg gatgtacttg taagctttat tctctgagaa tgtttgaaag 1680
 aagatcattt gaaacacagt tgtcaagagt ggaagcagaa ttgttaagaa gagaagctcc 1740
 tccctcgtat ggacaattga ttgctcaggg ttaattcca ccagttgaag atttctctgt 1800

ttgttcacct	aatcaggctt	ctgttttggg	aaatctgagg	ctagcgggtac	gatctcagct	1860
tggattttact	tcagtcaggc	ttcctatggc	aggcagatca	agcaacattt	ggaaccgtat	1920
ttttaatttt	gcaagatcac	gtcattctgg	gtcattggct	ttgggtctcag	cagatggaga	1980
tgagggttgtc	cctagtcaga	gtaccagtag	agaacctgag	agaaatcata	ctcacagaag	2040
tttgttttcc	gtggagtctg	atgatacaga	cacagaaaat	gagagaagag	atatggcagg	2100
agcatctggt	ggggttgag	ctcctttgcc	tcaaaaagtc	cctcccacaa	cggcagtgga	2160
agcgacagta	ggagcatgtg	caagttccct	aactcagagt	acccgagggtg	gtcatgcaga	2220
taatggaagg	gatgtgacaa	gtgtggaacc	cccaagtgtg	agtccagcac	gtcaccagct	2280
tacaagtgc	ctcagtcgta	tgactcaggg	gctacgctgg	gtacgtttta	cattaggacg	2340
atcaagttcc	ctaagtcaga	accagagtcc	tttgagacaa	cttgataatg	gggtaagtgg	2400
aagagaagat	gatgatgatg	ttgaaatgct	aattccaatt	tctgatggat	cttcagactt	2460
tgatgtgaat	gactgtctca	gacctcttct	tgatcttgcc	tcagatcaag	gacaagggtc	2520
tagacaacca	tataatgcaa	caaatcctgg	agtaaggcca	agtaatcgag	atggcccctg	2580
tgagcgctgt	ggtattgtcc	acactgccca	gataccagac	acttgcttag	aagtaaacct	2640
gaaaaacgaa	acgagtgtatg	atgaggcttt	gttactttgt	taggtacgaa	tcacataagg	2700
gagattgtat	acaagttgga	gcaatatcca	tttattattt	tgtaacttta	cagttaaact	2760
agttttagtt	taaaaagaaa	aaatgcaggg	tgattttctta	ttattatatg	ttagcctgca	2820
tggttaaat	cgacaacttg	taactctatg	aacttagagt	ttactatttt	agcagctaaa	2880
aatgcatcac	atattcatat	tgttcaataa	tgctcttcca	tttgtttctg	attgttttca	2940
tctgtatact	gtagttcact	gtagaaatgt	ggctgtgaa	actcatttga	ttgtcatttt	3000
tatctatcct	atgttaaatg	gtttgttttt	ac			3032

<210> 660
 <211> 846
 <212> DNA
 <213> Homo sapiens

<400> 660						
attcagctaa	tttgggggcta	ccagaaaatg	ctctgccagg	cctcctggat	aaatggggag	60
tcagccgtga	cagctgccgc	ttgcaagtgt	cttcattgtg	ccagtcgctc	ctcacacatc	120
ctttcattta	atcctcacat	tatgagggtg	aatgtcttta	ataagcttat	tttatgggta	180
ggaaattagg	gttatgaggt	taaatactct	gtcctagatg	acaaagctaa	tgagtaatatg	240
aaccaggatt	agaacccatg	taaatactttg	ctgtttctgc	cgctacacca	ctcccaagat	300
gagtttctca	tctgcatgtg	tgagcctctg	cttaatgctg	ctgttttgtt	ctcctccact	360
cctgcttttg	ctcctgtcct	catttgttta	atgactgggt	tcatttccct	gatcatattt	420
tttttccctt	ctcctatttg	aatgatgggg	gcacagtggg	ccagtctctt	gatactgagc	480
tgtaacaatc	accatccttg	cttgaagaag	tccttgcttc	tttgaatctc	tcatttggct	540
tgacatcaaa	gctgaaaaag	gttactgatg	acggatggga	ccttttcaat	atgcaaatata	600
tgtaatggta	caaacgactt	tatatcagta	taataaagtg	cttaccgatt	catttttatt	660
gctgcctgtc	catacgcgaa	gctgtaaaaa	agaatatattt	aatttatggg	aacgactcac	720
atcttggaat	atgaagggaa	aaaactgaat	cccaagggcc	acctctgccc	tagccgggac	780
ttctggggac	agggctggac	cccggggaca	gcttcctcgg	ctcacacggg	cgcctgcgg	840
gtaccc						846

<210> 661
 <211> 1859
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)...(1859)
 <223> n = a, t, c or g

<400> 661						
acctggtgga	attgggcctc	cctcccctgt	cttctcagag	caggtaatgg	caagcatggc	60
tgcgtgtgc	acctgggctc	tggtcttctt	ttcagcgttt	tcggccaccc	aggcacggaa	120
aggcttctg	gactacttca	gccagaccag	cggggacaaa	ggcagggtgg	agcagatcca	180

tcagcagaag	atggctcgcg	agcccgcgac	cctgaaagac	agccttgagc	aagacctcaa	240
caatatgaac	aagttccttg	aaaagctgag	gcctctgagt	gggagcgagg	ctcctcggct	300
cccacaggac	cgggtgggca	tcggcgcgca	gctgcaggag	gagttggagg	aggtgaaggc	360
tcgcctccag	ccctacatgg	cagaggcgca	cgagctggtg	ggctgggaatt	tggagggtct	420
gcggcagcaa	ctgaagccct	acacgatgga	tctgatggag	caggtggccc	tgcgctgca	480
ggagctgcag	gagcagttgc	gcgtggtggg	ggaagacacc	aaggccagct	tgctgggggg	540
cgtggacgag	gcttgggtct	tgctgcaggg	actgcagagc	cgctggtgct	accacaccgg	600
ccgcttcaaa	gagctcttcc	accatacgc	cgagagcctg	gtgagcgcca	tcgggcgcca	660
cgtgcaggag	ctgcaccgca	gtgtggctcc	gcacgcccc	gccagcccc	cgcgctcag	720
tcgctgcgtg	caggtgctct	cccggaagct	cacgctcaag	gccaaggccc	tgacgcacg	780
catccagcag	aaacctggacc	agctgcgcga	agagctcagc	agagcctttg	caggcactgg	840
gactgaggaa	ggggccggcc	cggaccccca	gatgctctcc	gaggagggtg	gccagcgact	900
tcaggctttc	cgccaggaca	cctacctgca	gatagctgcc	ttcactcgcg	ccatcgacca	960
ggagactgag	gaggtccagc	agcagctggc	gccacctcca	ccaggccaca	gtgccttcgc	1020
cccagagttt	caacaaacag	acagtggcaa	ggttctgagc	aagctgcagg	cccgtctgga	1080
tgacctgtgg	gaagacatca	ctcacagcct	tcatgaccag	ggccacagcc	atctggggga	1140
cccctgagga	tctacctgcc	caggccatt	cccagctcct	tgtctgggga	gccttggctc	1200
tgagcctcta	gcatggttca	gtccttgaaa	gtggcctgtt	gggtggaggg	tggaagggtc	1260
tgtgcaggac	agggaggcca	ccaaaggggc	tgctgtctcc	tgacatcca	gcctcctgcg	1320
actcccaat	ctggatgcat	tacattcacc	aggttttgca	aaccagcct	cccagtgtct	1380
atttgggaat	gctcatgagt	tactccattc	aagggtgagg	gagtagggag	ggagaggcac	1440
catgcatgtg	ggtgattatc	tgcaagcctg	ttgcccgtga	tgctggaagc	ctgtgccact	1500
acatcctgga	gtttggctct	agtcacttct	ggctgcctgg	tgccactgc	tacagctggt	1560
ccacagagag	gagcacttgt	ctccccaggg	ctggcatggc	agctatcagg	ggaatagaag	1620
ggagaaagag	aatatcatgg	ggagaacatg	tgatggtgtg	tgaatatccc	tgctggctct	1680
gatgctggtg	ggtagcaaaag	gtgtgggctg	ggataagaga	gggcagagcc	catgttttct	1740
gacataactc	tacacctana	taagggactg	aacccttcca	actgcgggag	ctccttaaac	1800
ccttctgggg	agcatactgg	gggtcttcc	ccatcttcag	ccccttctc	tggtttccc	1859

<210> 662

<211> 1622

<212> DNA

<213> Homo sapiens

<400> 662

gggttgagcc	acgcgtccgg	aaaaacaagc	ctgccaccca	gagacgtaca	acaaaatgcg	60
aactgtagtt	atttttctag	acctttggat	agccattaat	atggttccac	gttaataaca	120
gtggaacat	actgtatgtt	ctgttttgtt	tttcagtggg	aaaacattac	agaaatactc	180
tgaacaacct	tctgtcaagt	aaatttttcg	agaacttata	tgattataga	tctgaactaa	240
tttatttaat	caatctggta	tttgccttcc	ttttattttt	ctaggttctg	gcttttataa	300
acattgaaaa	tatcctcata	ggtcagttct	tgagtgttct	tattttcttg	ggataaagtg	360
aattgctgag	tcaaaaagaat	ttgctcattt	tcaatgcatt	tgatacatat	taccacattg	420
ctttcagaaa	agttatgcta	gttttcccaa	ccagcgtttg	atgggcaaaa	aaaacctggt	480
gagattgaat	ttatgtttat	tgggtttggt	atttcttttt	taaattgccc	ctcgtttttt	540
gctcatttta	ttctcttttg	cccattgccc	ctctttggga	tatttatctc	ttactggttt	600
gtaagacttc	tttctattaa	tagaggttgg	aaatagcagt	tatctaggtt	tttaatgttg	660
gtttgataaa	cactgaattt	tacttagttt	gcattagaga	gcttactgtt	aactcttaaa	720
catttaaat	ccctgttctc	agtttctaatt	ttcagtggtg	aatcaggtaa	gatacatttg	780
caggtgaaaa	agtttgaaat	gtaaaaagat	aaccaaat	atttaatat	tccttgggaa	840
tttgattact	ttttctggga	gaggagtctt	gggcaacaac	ataaatactg	ttatttgttg	900
atatttgcag	gttacgtttg	gtcttcaaat	aagtcaacat	tattttcttt	cacaaaactt	960
ggtttctctg	ctttctataa	tttcccaatt	aacatttaaa	taaaagacca	aattaaacaa	1020
ttaaacttta	tttaatttgg	tcttttggtt	aaatgctttg	tggetaccta	gcttaccttt	1080
tcagctttta	aggaaaaaaa	aaatcagaac	tttttatttt	ggttcggtcg	gagacagcct	1140
cactctggcc	cccagcctgt	agtgcagcc	cgtgatctca	acttactgta	gcctctcctt	1200
ccagggtgaa	gaaattcccc	ttgcctaagt	tcccccccta	ccccagcatt	gggattacag	1260
ccaccggcgc	cagcccggtc	aattttgggt	ccagggttcc	tatttccctt	ctggtggcgc	1320
gaaccgccgc	actaagacct	ccttttccgg	cgctaactgg	gggatccgcg	ccctcctccc	1380
tccttggcgg	ccctcccccc	gtctcgttct	ccgtcactgc	tccttctgtg	cgcggcgcgg	1440
ccgccccacg	cctctgctcc	cctctggcgc	gcgggccccg	gccactaga	ccctactacc	1500
tactgcgcct	ccccgcctcg	cccactcacc	gatcaccttc	ccgctcggtc	cgtccccgt	1560

gcgccgttct cccctacta tcccgcctcc ctctccccta ttcacgctca cggctagtat 1620
ct 1622

<210> 663
<211> 1404
<212> DNA
<213> Homo sapiens

<400> 663
gccccgcgt ccgccccgc gtccggttcc cagccctggg attttcaggt gttttcattt 60
ggtgatcagg actgaacaga gagaactcac catggagttt gggctgagct ggctttttct 120
tgtggctatt ttaaaagggtg tccagtgatga ggtgcagctg gtggagctcg ggggaggctt 180
ggtacagcct ggggggtccc tgagactctc ctgtgcagcc tctggattca cctttagcag 240
ctatgccatg agctgggtcc gccaggctcc agggaagggt ctggagtggg tctcagggtt 300
tactggtagt ggtggtagt ggggtagcac atactacgca gactccgtga agggccgggt 360
caccatctcc agagacaatt ccaagaacac gctgtttctg caaatgaaca gcctgagagc 420
cgaggacacg gccgtatatt actgtgcgaa aggccttttg ccccgcggt gggcgatatag 480
ggtgtatgaa gatagtggca tcttctttga ctactggggc cagggaaccc tggtcaccgt 540
ctcctcaagt gacatccaga tgaccagtc tccttccacc ctgtctgcat ctgtaggaga 600
cagagtcacc atcacttgcc gggccagtca gattattagt agctggttgg cctggatatca 660
gcagaaacca gggaaagccc ctaagctcct gatctataag gcatctagt tgcaaagtgg 720
ggtcccatca aggttcagcg gcagtggatc tgggacagat ttactctca ccatcagcag 780
cctgcagcct gatgattttg caacttatta ctgtcaacag ctgagtactt acgtgtggac 840
gttcggccag gggaccaagg tggacatcaa acgaactgtg gctgcacccat ctgtcttcat 900
cttcccgcga tctgatgagc agttgaaatc tggaaactgc tctgttgtgt gcctgctgaa 960
taacttctat cccagagagg ccaaagtaca gtggaagggt gataacgccc tccaatcggt 1020
taactccag gagagtgtca cagagcagga cagcaaggac agcacctaca gcctcagcag 1080
caccctgacg ctgagcaaa gacactacga gaaacacaaa gtctacgcct gcgaagtac 1140
ccatcagggc ctgagctcgc ccgtcacaaa gagcttcaac aggggagagt gttagaggga 1200
gaagtgcctc cactgtctcc tcagttccag cctgaccccc tcccatcctt tggcctctga 1260
ccctttttcc acaggggacc taccctatt gcggtcctcc agctcatctt tcacctcacc 1320
ccctcctcc tccttggtt taattatgct aatgttgag gagaatgaat aaataaagt 1380
aatctttgca cctgaaaaaa aaaa 1404

<210> 664
<211> 1745
<212> DNA
<213> Homo sapiens

<400> 664
caaagtcat agcagggtga acatgcttgc tgtcattttc acagattctg gtctttctta 60
tggggaacct gagttcctgc attaaagtcc cccagaaga tcaatggaag gtggattcca 120
aagagtgggc aagtgaggac cccttctctg ttaccaaggt gaccccaagg aacacagtaa 180
atgtggcggc ttattttggc tcccaggac ggactggagc atcagtagtg cctgagttca 240
tcaaaggaca gatgtcaag acaccttgat caccattagg tggaaatgaa ggagccaaaa 300
atgggcgcag tggctctca gcagagacgc tcctgaatgt atagacatgg gaaccacttt 360
cagcatcaaa aaaggaaacg ttctgcatgc ccatatccag aaaaatcccc actcgtctga 420
acttgcggtc tactaagagg aaagtacagc gcaccgtgct ggcagagagg cggcttccat 480
ccctcaaact cacagtcagc aatccaagct ctgtggtcag ctggatcttc cctttgcagt 540
gaacagattc tctgcagact cccagggtccc attctgtgct tgttccacg tccacctccc 600
agtagtggcg gccacaggta aagcgagggt agcccaggat gcaaacggac acgtcaaatac 660
tctcggaag gtcttgccga ttctgtgtga tgagcccat tcggacgctc ctgaggtcgt 720
cagaaatgag gaggaagtgt ttggtgtgt cgcatccaa ggtcatatcc actgtgaaaa 780
ggaaaaacaag ttgctcagca agtggaaga agccaacccc atgcctctct tctacttcaa 840
aggcccaaat atctcctgac tttagtttct ttaattctgt ttcttctccc aaaatcaaaa 900
ctttttcatg agggcaactt cctgactag ttcaaattct cataggtag ctgttgaggca 960
ataccaact cttattcaca gtagcaatta tttacttta tgtcacgtgt ttgcttcatt 1020
ggacttttct tcatttagag tggagggtct ctgaaggcag acaccatgac cccctttcta 1080

```

ccaccttgat gcatgaaaaa atgaatgata attaagacaa tgcaaatggt cgatgttaaa 1140
tatgtttctg cttccatctt gtattgctca actcagtata tagagcatga ttccaggcct 1200
ttgttttcca tgtttgtaag caaatattt gtgcatggtt ctgacagcag gtagggatc 1260
tctgcagctg acaatgtgat gacagagggt ccggtcctgg acattaggag gctccaaggc 1320
caggaggaag aggggggcct tagatgaaag aatgttttcc atcctacatg ggaggtgaga 1380
ccttaagcaa aacaatggta aattttggag tgaagagaaa ggtatttgaa agttgtttgt 1440
tggctgagcg caggtggctc acacctgtaa tcccagcact ttgggaggcc gagacgggtg 1500
gatcgcgagg tcaggagatc gagaccatcc tggctaacgc gtgaaaccct gtctctacta 1560
aaaaacatac aaaaaaatt ggccggacat ggtggcgggg gcctgtagtc ctgctgctc 1620
ggtagactga ggcaggagaa tggcatgaac ccaggaggcg gagcttgcaa tgagcagaga 1680
tcatgccact gcacctccgg cctaggcggc agagcgagac tccatctcaa aaaataaaaa 1740
aaaaa

```

```

<210> 665
<211> 770
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> (1)...(770)
<223> n = a,t,c or g

```

```

<400> 665
tttttttttt ttgggatcag agtttcttta tgggctatag gggccacaag gctggccagg 60
tggcaaggtc accggtggcc cggtcaccga tacaggtagt cagcctggat gttggccgcg 120
atctcgccct ccacttgtc accattgttg agtagcttct ccttgttgta cagcaactcc 180
tcatcgctct cgggtggagaa ctcaaagtgg gggccctcca cgatagcgtc aacagggcag 240
gcttcctggc agaaaccaca gtagatacac ttggctcatgt caatgtcata gcgtgtagtc 300
cgggcggtgc catctgctct tggctcagcc tcaatggtga tggcctgtgc aggacagatg 360
gcctcacaga gcttgaggc aatgcaacgc tcctctccag atgggtagcg gcgcagtga 420
tgctcccccac ggaagcgcgg actcagtggg cccttctcaa aggggtagtt gatggtggca 480
ggctctcgaa agaggatatc tagggctcatg ccagctctc ggatgagttc tgtccacatc 540
agaatccgag ctgcattgtc agtttcggac ttcattgtcca cctcagactc ctgttccttc 600
ttattccatc acttgtagt tgccgccact gcgctgctat gaaggctttg tccaataaga 660
tgtctgtgct gcattggcct ggccaaagcc cgtaacagca ttgatgagct caggcgatac 720
atctcgaagt gctgcgggcg cgtncntggg cganattcct cagagttctc 770

```

```

<210> 666
<211> 864
<212> DNA
<213> Homo sapiens

```

```

<400> 666
gccggggaat tcccttttca tccttgtctt cttggattct ttggcgctta tgatagagtt 60
ggcttttgcc tcattcttaa aatgtgcttc attttctttg ttgatactgt tctcttttag 120
tttccactt tggtttttcc tcagctgctt tgcattgctt tactcatttt cctgcctctt 180
aagtagaatt tcaatcctta gccccttttg tcaccttctt cctaggcaat cccatgacct 240
ttgtactaat gatttgtaaa tctctagtc cagcctaggc ctttgtgtaa actcctccat 300
taagtgccta ctaggagatc tgcattgcta gatgttctaa tgtgatctca aactgaacat 360
agtcaaaaact caactccctg tcacctctgt catgccatcc acaccatgcc gtgctgcacc 420
ctgtcatacc gcatgagcca ccagaccgtc atgctctgtg acttgtctgt ctgcccatt 480
ctattttgag cttcttgagg gcagggatct cattttttat ctctgtatct tcagtggccg 540
gcacattgag cctgctcaat gaatgcgtga gagaatggaa gtacggaaga agagcgacag 600
cctgacagcg ccccaaatgt tgctccttac tctaaggcct gctgatcaca cccacaaaa 660
actcatgag cccgtcgaaa tgggtctagc cctgacaagg ggacttttta attcaccggc 720
gcaccccatc tcgcctcca ggacggacgg atgatcgcac ctccccctc tcgggctggc 780
acccaacggg ctttacgcct ggtcgtgcac ccaacatcct atgtcccgc ccccccgcg 840

```


gcatttcccc cccccgcaga cccc

864

<210> 667
 <211> 831
 <212> DNA
 <213> Homo sapiens

<400> 667
 attagaggaa ctcattaaat cttttggacc aagagctaac actgaaccct agaactacct 60
 ggtttcatga atgccaaaag agatattttt agtttcacat ttgtttaatg aacacaggcc 120
 ctggaacat catctgagta tagtaatttg agatataatt ttaagattac tgggaagacag 180
 tgtaataggc ttgatgtctg tcctcatctg gtgtttgata ttctttcctc ttgagtattc 240
 caggcccaag agaggcttga aagttgataa tgtgtgtttt tccactgttg ccctttcaac 300
 aggggtctaga atttccaact ggtctaactg tgaacttgt cttcttgctg aaatgttttt 360
 ccttgatttg ggggttttctt gaaattattg ccaaagtcac atgacataaa ttgtaaatgc 420
 cacaaaattt attctgctat tcttgagata aaacatggaa atctgaaagt tgaaggctag 480
 gacttgggaa gagaacttaa gaagctacca ttcaaaaatc cttaatgaag ggattatatt 540
 acctgcttgc tttagacctg aaagtctctt gaatgatctt gttcatctgt cagacaatcc 600
 ctgctcaaat gattaataaa aacactctag cctgagggtg ggcttgctg gaaacactga 660
 gggaggcaaa gtgcagcagg aattagaatt tgaattccaa acccaacta tgcctagagc 720
 aagggtttct ccaccttga tgtgtcaca gccagcagga tgcttttacc cccaccagc 780
 aacaccaagg gacccccccc aagccccagc tggcacccat caagcccccc c 831

<210> 668
 <211> 1652
 <212> DNA
 <213> Homo sapiens

<400> 668
 aaccgtctcg ccaagcttgg cagcaggcgt gcccgcttcc aaaatggcgg cgccggcggt 60
 atctggtgcg cttggccggg cgggctggag gctcctgcag ctgcgatgcc tgcccgtggc 120
 ccgttgccga caagccctgg tgcgcgtgc cttccatgct tcagctgtgg ggctaaggctc 180
 ttcagatgag cagaagcagc agcctcccaa ctcatcttct cagcagcatt ctgagacaca 240
 gggggcagaa aaacctgatc cagagcttcc tcatccccc ccaggtata cagaccaggg 300
 cggcgaggag gaggaggact atgaaagtga ggagcagttg cagcaccgca tctgacggc 360
 agcccttgag tttgtgcccg ccacgggtg gacagcagag gcgattgcag aaggagccca 420
 gtctctgggt ctctccagtg cagcagccag catgttcggg aaggatggca gtgagctaata 480
 actgcatttt gtgaccaggt gcaatacccg gctcacacgt gtgctagaag aggagcagaa 540
 gctggtacag ttgggcccag cggagaagag gaagacagac cagttcctga gggatgcagt 600
 ggaaaccaga ctgagaatgc tgatcccata cattagcac tggccccggg ccctcagcat 660
 cctcatgctc cctcacaaca tcccgtccag cctgagcctg ctcaccagca tgggtggatga 720
 catgtggcat tacgctgggg accagtccac tgattttaac tggtagaccc gccgagccat 780
 gctggtgccc atctacaaca caacagagct ggtgatgatg caggactcct ctccagactt 840
 tgaggacact tggcgcttcc tggaaaaccg ggttaatgat gcaatgaaca tgggcccacac 900
 tgccaagcag gtaaaagtcca caggagaggg actggtgcaa ggactcatgg gtgcagcagt 960
 gacgtcaag aacttgacag gtctaaccga gcgtcgggtg gaggaagggg tataagctac 1020
 aatgcctaga agagaatgag cggacagatt gaaagagctt tgaagagtat aagggtgcat 1080
 ccacataacc tgggtgtcac gagaacacac taaaggactc ctgagtcact accacagcca 1140
 cctggaaacc acaaggcatt tgatgctacc gttctgggta gggattgggc tgcttcttca 1200
 gttcctaata ccagaccaag cctcctgatg cctttctgca ctgcaactgt gtgattgaaa 1260
 aatgagatgt tcatccaagc agtcaagcca cagaaaccca gcatgtccct gtcacaatct 1320
 catgggcacc ttgatcatgt cttaaccctc ccttaaccctt ggggctccca agccagagtc 1380
 aaggctctgac gccacctcaa ggtgacagct catctccagc acagcacagg cgtgtgcaca 1440
 cagaggtgtt ccttgacgcc cctccctctc cagggtgctc gagatgctgc tctggggagc 1500
 cccctcagaa aactgcctca cctgagacaa gtgctgctg gacagagggtg tgattccagg 1560
 cctggtgtca catgacacca gcatgcattg caggattatt agtgattttt gagtctgtaa 1620
 aaataataaa tatgtttgaa gtaaaaaaaa aa 1652

<210> 669
 <211> 934
 <212> DNA
 <213> Homo sapiens

<400> 669
 tatcgctcgta aacatcacta cgcctagctt ggcacgagcc taatacagac cctatctcaa 60
 aaacaaacaa aaagagattg ctcattggca cttggtccct gaatgtgcta atgagatgtg 120
 gcattcatgg gccatctgct gtgtgtgtgg ggttttacat acatccttcc ttgtatatcc 180
 ttaaggcatt cacctcttca gcctccagga tgggaagggt tttgcaggaa tgtatctttt 240
 cctctcttga gggcctcact tgctcctcac cataggagga aggacggatt tatctgattg 300
 gagagactgt aaataaagac tgactggaac atatggacca ggggcgggtc tgctgcatgg 360
 acgttgggct gtgtgggttg ctcactctcc tgccctcttc ttgcctatgc agaactgatt 420
 tctcacctct gccttcctgt ctgttcctgg tgggttagga acgtacagga gagaagggat 480
 gaagattagt ttctcttacc cctgaagca ttatttttca cagggcctct ccacctgttc 540
 agtggttagt aagtgtgtaa tgagtggaca gggaaacagc cttggaaaag cttactatcc 600
 cgcacatccc tactaagtga tggcaatgaa tcaggggagc cgggtgtcca caccccaagc 660
 gccacacctt ggtgggttgt aagaatcccc tgggttagga gggcatgacg gtaaacatct 720
 cctctcgggt tattccctgc catctggctg gtttgatccc ccttctaate cccctggggg 780
 ggggttcccc ctccaatca ggcttggggg accacagggg ccctttgggt tactaacctg 840
 ggccctggcc acaaccgtta ttttatgggg acccccgaag ccatggggcc caaccctttt 900
 gggcctctct tttctcaaca ttcatatgct tgcc 934

<210> 670
 <211> 831
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)...(831)
 <223> n = a,t,c or g

<400> 670
 tgattcactg gccggcggga ctgggagaac attgtttatt ctattgacaa tatctttccc 60
 accacgaggg caataccctt ctgagtactt gaccaatgct ctttgaattt cagggtctcc 120
 caatttgaat agttttcaaa totcagtttt accagtccag tttgaacttt aaagactatt 180
 cctactcatc ttttcagctg gtttttcatt tgattttata ccatttcctc acatgcatgt 240
 actgatcaga actccctgct ctctaatact ctgcctggca aactctagcc acgctagtct 300
 acctggattc tctgttctat cttttctatt taaggagtct tgcagactcc ttctgaattc 360
 ttcttttctg ctgcatgggc tagaaattct ctacggggca attgcaggcc aatgcaactc 420
 attttgtttg ttttccatct ctacgggatc actgtccttc aatgcctcat gcccgttgcc 480
 ttgaaaacca ttgtttaata tattcatctg gacttttaag tgcggccatt ggaaagataa 540
 atctagcccc cgggattcca tcttgccccg agagcacagg ttctgctaca tattggtgag 600
 cccttttttg ggggggcggc gcgcgattgt agacgccact aggcgcgtca acaacatacg 660
 agaagaggag aactcgtcgg gatgttgtgt acgcgcggnn gacgagcccc cgancancgc 720
 cgccaccccc cgggcggggc ccgcgccgtc ctccaagcat cacatggtgc aggcggacgg 780
 gtatctacgt gggacggcta tatctaggca cgtggaggac cgacggcgct g 831

<210> 671
 <211> 1790
 <212> DNA
 <213> Homo sapiens

<400> 671

gacggagggtg	cgccaaggat	ccccgtggcc	atatggcgcg	tccgactagc	agtctatgcc	60
tgcttctcta	cttcttctct	actggtaaaa	gcgtgcctgt	atccatctta	cccggcgttg	120
tgcgcatgct	gctgccaccg	cctcctcatc	ttctgcccgg	ccaaccggcc	tgccccgctg	180
cagtgatgtg	cgacaaggag	ttcatgtggg	ccctgaaaaa	cggagacttg	gatgagggtga	240
aagactatgt	ggccaaggga	gaagatgtca	accggacact	agaagggtga	aggaaacctc	300
ttcattatgc	agcagattgt	gggcagcttg	aaatcctgga	atttctgctg	ctgaaaggag	360
cagatattaa	tgctccagat	aaacatcata	ttactcctct	tctgtctgct	gtctatgagg	420
gtcatgtttc	ctgtgtgaaa	ttgcttctgt	caaagggtgc	tgataagact	gtgaaaggcc	480
cagatggact	gaccgccttt	gaagccactg	acaaccaggc	aatcaaaagc	cttctccagt	540
gatggatgga	tggactgata	actccggaag	aatgactctc	ctgtggcctc	acactgctgc	600
ctgtctgtct	gtcactctct	atctgccagc	ttcttcagct	aaatacttta	agaggggtga	660
ggggagagag	aaattcataa	caaatccgac	taccagaaaa	aaaaaattgt	tttgaggagg	720
gggcaaaagg	aaccatgatc	aggcttttac	tgggattcct	gatcaagtaa	gcctcttccc	780
tttctaataa	aatatacacc	ttatacccaa	gggagagcaa	agacaaaata	caccagtaac	840
atttgacctt	ttcagctccc	tagctaattt	attagattgt	gttgaaggtc	tgattctaca	900
aaggccaact	ctacatattt	ggtagcccta	actgtctgag	cagtagtggc	tgctgtgatg	960
taaacttagg	gtgctgagat	aagcaattag	ctctagcctt	ctgccttaag	aatgcactct	1020
actggggatt	tcctggcata	gttaagagcg	ctgcctataa	ggttggtgac	caaactcttc	1080
ctcggtagct	ttaagcttta	tgtgaaagct	tagttaaggc	gaggaggggc	acactcctaa	1140
attgctggat	gactgaactt	tggattttct	ctccccttcc	acatggattt	catgtctctt	1200
tagataaaac	tgactagttt	tatttataaa	atcttaagtt	ttggaagtct	aaaggagaaa	1260
ccattccagt	atgcataattt	ttttctcctc	tagattcata	catttatata	gcattgaaac	1320
actttcaaac	tcctgtctgg	tagtaaaagg	ggatttaaaa	atagaatcat	agccataaag	1380
ctgttagtat	cataatgaaga	gagaacagtt	atcttagtac	ctatggattt	tctttatttg	1440
ctgtttgaat	ggattgacct	tggttatgtg	ttgagaatta	aggaacattc	tttgaaatgc	1500
ctctctcaga	cccatcttgg	aggctgatta	cttactgcac	caaagctatc	actgggggtga	1560
gatttactgt	ttggacaaat	ttagcccat	cccttcaaaa	atacacttgt	aaccagggtt	1620
tcccagagtt	gttcattgtt	tgtgattgca	tgtttccttc	cttcaactgt	gttctccctg	1680
gcatttcagag	aggaggggaga	ggaggaagag	gaaggggagg	gaagcttccc	aagagtagcc	1740
tcaacctgtg	cttctgtgca	ttattctgag	aataaatttc	tgtttcaaaa		1790

<210> 672

<211> 703

<212> DNA

<213> Homo sapiens

<400> 672

ctaatttttg	ttatattatg	cggccttgga	taaggaagtt	tcttaggctt	tcattattcca	60
aattatttga	ctatttctaaa	aacattttta	agtattttga	tggatgtagt	ctatttctaat	120
ataatgtctt	tcaagtgttt	gaaagttact	acttattcaa	aactcaactg	tctggcagct	180
tttcttatcc	tgaactctgt	gaagaacttc	agggacagga	ggtaaaatgt	ctttgaagag	240
taagaaatcc	aaaacttcat	gtatttacat	gttctggctt	tgtctcatag	gattcttctt	300
tctccttaca	tacctcctt	taaatccgta	cctccccggg	tcttctccat	cttgcaaatg	360
gcaccaatgt	ccatcctaga	cattgatcat	cccagaagtc	taggagggtga	ttcttctcat	420
tttttttagt	ctgttgcgca	agccctcacc	ttttgcccgt	ttgcccctcag	gccttttaac	480
aactattcct	tacagagacc	ggttttccaa	aaggcccccg	cattccatca	tttctctgtg	540
aaaaaatttt	aatgggatcc	tcacccctc	tggatgggtt	aacccctcga	gaccccccggg	600
aatgttgcc	tgccctgcct	tctgttttaa	ttcgaaaaac	cttgcttccc	tcagacgggg	660
ggggaataaa	agttttgggg	gccccccccc	ccccccccc	cct		703

<210> 673

<211> 732

<212> DNA

<213> Homo sapiens

<400> 673

cacagtttct	tccattaagg	cattccaagc	cagtagacgt	attcttctgt	ggccaaggta	60
gctcaatgat	ttgaccttct	taaatgtgaa	catttcatat	gttccctgtg	ttttgtaata	120

taattactgt	catcaccatg	acatctttat	ttcttattct	tctctcatgt	atatttattt	180
tgataacctg	ttgtctataa	tgtagatata	tttctttctc	ctttacattt	tccgtcacac	240
cctccggttt	ctttgttagc	atcctccagt	atcttgccca	cattctccta	cttattactc	300
ttcaattcca	tttcagagtc	tgttacgtga	acataattac	ccttatccct	cttgacaaa	360
tctttcttta	atctgttgga	tgactctgaa	aggattagtt	tcagtttggg	gcttgagctg	420
tgaccagaca	cacaactgct	attagttcct	accatagtcc	tacctgggtc	agaagaatga	480
gaaaaataat	ccttactttt	tcctcctcta	tgagcaggag	gtgcttactt	tttactgatt	540
tgaccagctg	aacattttta	gataatattc	agcactgtag	atgaagatta	gaaattactg	600
cgcaaaacttt	aagtgagaat	aaaagaattt	atgggggtcc	tcacaaaatt	ttaaaccaa	660
gtatctttca	cttatcggtc	ttctctaaag	taagaccaca	gccattttgc	ggggtcattt	720
caccattacc	tc					732

<210> 674
 <211> 366
 <212> DNA
 <213> Homo sapiens

<400> 674						
ggaagagcta	gttctacttt	tgtccaagtc	tagggctaga	gaccagtttc	caacatacat	60
aattttcaca	aagtctagaa	ctcaggttcc	tagacttctt	tatgcagcta	tgggggtttt	120
tgaaattaaa	cttccctg	tcttctcttt	gcttttgggc	ccttgggagc	agaggcttca	180
ccttggtttt	ggctgtaact	cccattaact	ctactgggtg	ggcagcacat	ctccccagc	240
atgtcaagat	gagattattt	tccatccaat	tgttttaatg	ttgtgggtgt	tgagtgagtc	300
tacatttaat	ctttggtttc	attataaggt	tcagagcaga	cagagtgtgg	ggagaacata	360
cacccg						366

<210> 675
 <211> 360
 <212> DNA
 <213> Homo sapiens

<400> 675						
actactttgc	cgctacacat	tcttagtgaa	tagcctcctt	ggcatgtttt	tgaaaactta	60
aatgttgctg	gtaatcatgt	cacagcaatc	tccttggaga	gcctttgtgt	cctgttctca	120
gaagaaatat	gccgtttttc	catgttaatg	gttttgaaat	tagtgatttg	ctctattttc	180
attggaaagg	aaggtcactt	tgtgatttcc	taccttcctt	cattttctct	gaacattcag	240
gatactctta	agtcagttca	tcagccatgc	agtgcactgt	ctgggtataa	catgcctgaa	300
aagccagagg	aatgttctat	caaagagcgg	catccctatt	ctcagagact	gttcttagaa	360

<210> 676
 <211> 709
 <212> DNA
 <213> Homo sapiens

<400> 676						
gaatattcct	tttttaaaac	atactttaa	aaatcttttc	ttacctgtga	aagcttatgg	60
cacatagtag	gcatttagca	aatgttggtt	tccttccttt	tagaccgaca	tttggttggg	120
actggtttta	actaccttga	ggacttttct	tatctcacc	atctcaaagt	tctcctcccc	180
tgtagggtgt	atgggcatca	gctgcaagtt	gcttcttctg	actagagtct	gctacctgat	240
caccocgtta	gatcttgaga	ggtttccctt	cccaaact	gagcaggtga	catttccgga	300
acgcagagtt	agcgtcttcc	tgetgcctct	gagctgggtg	ttggacacaa	ggctgcccag	360
agagcctggc	tgacagtgte	gacacagctc	tcacaggac	gtggttggcg	gcagtcacct	420
ggtcaccaca	actcttctaa	gcctcccagc	tcgggaattc	tggacctctt	gcctcctcta	480
aattggatgc	tgtctgatat	ttccaaaagg	ataccatgct	tgatgagatc	aaaggaggag	540
aggatgactc	agaaaagacc	cagaagagct	cacagtgtct	ttagcaggat	gcttagtgac	600

atggagtcct ctgacagcaa tagtgcttgg agacattttt acacctatgg gcacaggcac 660
 atgcgtacac cccccccccc ccccccaaca aaacctgctg gccgaatgg 709

<210> 677
 <211> 394
 <212> DNA
 <213> Homo sapiens

<400> 677
 tctagagtca taatatatct gtctggaaca tagtagattc ttaataaata ttggaatgaa 60
 agttttaatgc ttgaaaaaag gcttctttta cgtctactaa agttctagct caggatactg 120
 gaggggtttt atttactttt ttttctctct catgaaaatc tagactctta aaatccagta 180
 tcttttagtag ataatttgca tttatttatt atccaagttt tacatcttgg cgtttttcca 240
 gcaggagatac ctctcatgat tctgttccac tgtgagaaat tatatgcact tagaagcttt 300
 gatttctggt tcatgttaga acttctcagt acatggccca gggctttggg gctgctgtgt 360
 cctggtctgg ccattgaggc tcatgaaggc tgag 394

<210> 678
 <211> 624
 <212> DNA
 <213> Homo sapiens

<400> 678
 cgaatatgtt caggaaaaat ctttaattat gaaaactctg aaaatcttca catactattt 60
 tttatccctt tctaacatct ttatattgac gattggcctg acgtgtgcct ctggccccct 120
 tgactttacc cctgtgtttc tgcttggaag gggctccctg aagtgcacaa atgggtcctgt 180
 tgcacatttg cccctgaag ctctggaaag cggctcccaa atcccatccg gatgtaactg 240
 gaaggaaatt ccaacatcct cctagtccag ccgagggggg tcccaccacg gatttccttt 300
 tcagggtccc cattgcatta ctggacaact tctaactatt gaaaattttc cattgggaga 360
 attctccgtg tgtcattttt ctgtagtctc atttaagtca gtgatagtta ttttttatct 420
 tctgtgtttt ctctacttcc tgattaaatt atgacctcct caaatggaag ggcaatataa 480
 actcatttct ttttattatc ccacagtaat tgtcaggctc agacttctct gtgagcatca 540
 ccgactgacc aggggtaccgc tggctgggat gttacatgga gcagttacac tagcatttta 600
 gtttcaaattg gatgcagatt cagc 624

<210> 679
 <211> 340
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)...(340)
 <223> n = a,t,c or g

<400> 679
 ggtccactga tctntggtgg gtattatttg ccagagcaac aattcacctg tcttccatag 60
 agcgtgcccc gtacacgtat gtggcttttc tgtgcctggg tcagcacgtg gggccagggc 120
 tgcccaccag gcagggggca gatgatctac gcatctcatc acctctcagt tcacaccacg 180
 tctccccatc actggctttc agcgtgggcc cttcaagggt gggccgtctt tcttgagctg 240
 gctcacgggg cgtcatctgc gtcttctggc caagctgatg attccacctg ctctttttgc 300
 tctccctgga gagtctctgc agagcacaac tcactaacct 340

<210> 680
 <211> 1753
 <212> DNA
 <213> Homo sapiens

<400> 680
 ttctcgtgctg aaaatctggg tcacagctga ggaagacctc agacatggag tccaggatgt 60
 ggccctgcgct gctgctgtcc caccctcctcc ctctctggcc actgctgttg ctgccccctcc 120
 caccgcctgc tcaggactct tcctcctccc ctctgaacccc accagcccca gcccgccccc 180
 cgtgtgccag gggaggcccc tcggccccac gtcctgtgtg cgtgtgggag cgagcacctc 240
 caccaagccg atctcctcgg gtcccaagat cactgcggca agtcctgcct ggcactgcac 300
 ccccagccac cccatcaggc tttgaggagg ggcgcctcc atcccaatac ccctgggcta 360
 tcgtgtgggg tcccaccgtg tctcgagagg atggagggga ccccaactct gccaatcccg 420
 gattttctgga ctatggtttt gcagccccctc atgggctcgc aacccacac cccaactcag 480
 actccatcgc aggtgatgga gatgggctta tccttggaga ggcacctgcc accctgcggc 540
 cattcctgtt cggggggcctg ggggaagggtg tggaccccc gctctatgtc acaattacca 600
 tctccatcat cattgttctc gtggccactg gcatcatctt caagttctgc tgggaccgca 660
 gccagaagcg acgcagaccc tcagggcagc aagggtgccct gaggcaggag gagagccagc 720
 agccactgac agacctgtcc ccgctggag tctactgtgt gggggccttc ggggactcac 780
 ctacccccac ccttgacctg gaggagcccc gagggggacc ccggcctggg atgccccacc 840
 ccaagggggc tcagacctc cagttgaacc gctcactcag tggtcagcgt ttctgcaca 900
 ctttacctct catgtgcgtt tcccggcctg atgttgtggt gggtgtgcgg gtgctcactc 960
 tctccctcat gaacaccac ccacctcgtt tccgcagccc ctgcatgtg ctccagaggt 1020
 ggggtgggagg tgaagctggg gctccttggg cctcatcctg tcatggtctc gtcccattcc 1080
 acaccatttg tttctctgtc tcccctacct actccaagga tgccggcctc accctgaggg 1140
 ctcccccttg ggaaatgggg taagtgaagg gccccagact tcacccccag cccactgcta 1200
 aaatctgttt tctgacagat gggttttggg gactgcctg ctggcactaa catggaggaa 1260
 aggggactcc cattggccct tcccttttct cctaacagtc ccttgggtct ggtctgtcct 1320
 gggctgtctg tgtgtgtgcc attctctgga cttcagagcc ccttgagcca gtcctccctt 1380
 ccagcctccc ctttgggctt ccctaactcc acctaggctg ccaggagccg gactcagctg 1440
 gttcaaggcc atcgggagct ctgcctccaa gtctaccctt ccttcccggt actccctcct 1500
 gtccccctct ttctcctcct cttccttcca ctctccttcc ttttgttcc ctgccccttc 1560
 cccctctcca ggttcttccc tcttctcac tggtttttcc accttccctc ttccctctct 1620
 ccttggtccc taggtctgga tatatatttt tgtattatct ctttcttctt cttgtggtga 1680
 tcatcttgaa ttactgtggg atgtaagttt caaaattttc aaataaagcc tttgcaagat 1740
 aaaaaaaaaaaa aaa 1753

<210> 681
 <211> 1538
 <212> DNA
 <213> Homo sapiens

<400> 681
 tcctgtctcg acgatttcgc ggccgcctcc gcggggctgt gggaagcttg ggctgtcccg 60
 ggaccgtcag tctcctcctc tgacctccc tttccccttg tgtgtagggc cgccgtccca 120
 ccccccacctc gccggagtcg gggggcgccc cgggtgtccc tccgagcctg ctgcactcca 180
 cgtcccccta ccagggtccc agccccagg gaaatctccg accaggcccg cccaggagcc 240
 agatccaggc tcctggaaga accatgtccg gcagctactg gtcctgccag gcacacactg 300
 ctgcccgaaga ggagctgctg tttgaattat ctgtgaatgt tgggaagagg aatgccagag 360
 ctgcccgtcg aaaattaccc aaccaagaga aatgtaggct gggtagcctg aatcaccccc 420
 tgcaggatgg actttctggt cctcttcttg ttctacctgg cttcgggtgt gatgggtctt 480
 gttcttatct gcgtctgtc gaaaacccat agcttgaaag gcctggccag gggaggagca 540
 cagatatattt cctgtataat tccagaatgt cttcagagag ccatgcatgg attgcttcat 600
 taccttttcc atacagaaaa ccacaccttc attgtcctgc acctgggtct gcaagggatg 660
 gtttatactg agtacacctg ggaagtattt ggctactgtc aggagctgga gttgtccttg 720
 cattaccttc ttctgccta tctgtgtcta ggtgtaaaac tgtttttttt caccctgact 780
 tgtggaacca atcctggcat tataacaaaa gcaaatgaat tattatttct tcatgtttat 840
 gaatttgatg aagtgtgtt tccaaagaac gtgaggtgct ctacttgtga ttttaaggaaa 900
 ccagctcgat ccaagcactg cagtgtgtgt aactggtgtg tgaccggtt cgaccatcac 960
 tgtgtttggg tgaacaactg catcggggcc tggaaatca ggtacttcct catctacgtc 1020

ttgaccttga	cggcctcggc	tgccaccgtc	gccatttgtga	gcaccacttt	tctggteccac	1080
ttgggtgggta	tgctcagattt	ataccaggag	acttacatcg	atgaccttgg	acacctccat	1140
gttatgggaca	cggctctttct	tattcagtag	ctgttcctga	cttttccacg	gattgtcttc	1200
atgctgggct	ttgtcgtggg	tctgagcttc	ctcctgggtg	gctacctgtt	gtttgtcctg	1260
tatctggcgg	ccaccaacca	gactactaac	gagtgggtaca	gaggtgactg	ggcctgggtgc	1320
cagcgttgct	cccttgtggc	ctggcctccg	tcagcagagc	cccaagteca	ccggaacatt	1380
cactcccatg	ggcttcggag	caaccttcaa	gagatcttcc	tacctgcctt	tccatgtcat	1440
gagaggaaga	aacaagaatg	acaagtgtat	gactgccttt	gagctgtagt	tcccgtttat	1500
ttacacatgt	ggatcctcgt	tttccaagaa	aaaaaaaa			1538

<210> 682
 <211> 1057
 <212> DNA
 <213> Homo sapiens

 <220>
 <221> misc_feature
 <222> (1)...(1057)
 <223> n = a,t,c or g

<400> 682						
ggcggatggg	gaaacaattg	agattgaggg	aggcaggcag	agcggagcga	aaacaggagg	60
acagaaatag	cgaagcaagg	ccaagatcgg	gacccccacc	aggaggtgc	ccagtacaga	120
catgaaagta	aggcgggaaa	gcagctcaag	cctcaccacc	cgcctgccc	ccagccccgc	180
cactcccagg	ctcctcggga	ctcggcgggt	cctcctggga	gtctcggagg	ggaccggctg	240
tgacagcgcc	atggagtgg	tgctgggtctt	cctctgcagc	ctgctggccc	ccatggtcct	300
ggccagtgc	gctgaaaagg	agaaggaaat	ggaccctttt	cattatgatt	accagaccct	360
gaggattggg	ggactggtgt	tcgctgtggt	cctcttctcg	gttgggatcc	tccttatcct	420
aagtcgcagg	tgcaagtgc	gtttcaatca	gaagccccgg	gccccaggag	atgaggaagc	480
ccagtgagg	aacctcatca	ccgccaatgc	aacagagccc	cagaaagcag	agaactgaag	540
tgacgccatc	aggtaggaagc	ctctggaacc	tgaggcgggt	gcttgaacct	ttggatgcaa	600
atgtcagatc	ttaagaaaac	cggccacttc	agcaacagcc	ctttccccag	gagaagccaa	660
gaacttgtgt	gtccccacc	ctatcccctc	taacaccatt	cctccacctg	atgatgcaac	720
taacacttgc	ctccccactg	cagcctcgcg	tcctgcccac	ctcccgtgat	gtgtgtgtgt	780
gtgtgtgtgt	gtgtgactgt	gtgtgtttgc	taactgtggt	ctttgtggct	actgttttgt	840
ggatgggtatt	gtgtttgtta	gtgaactgtg	gactcgtttt	cccaggcagg	ggctgagcca	900
catggccatc	tgctcctccc	tgcccctgtg	ggccctccat	caccttctgc	tcctaggagg	960
ctgctttgtt	gcccagagaac	cagccccctc	ccttgatttt	aggggatggc	gtaggggtaa	1020
ggagcaaggg	gcagtggtn	tcaagtngtt	ttnggtt			1057

<210> 683
 <211> 1930
 <212> DNA
 <213> Homo sapiens

<400> 683						
aactgataca	atgcatctga	cacgccagct	tggacgagga	ccgagcttgg	ctgtgtttat	60
ctcgttgggg	actaaggcgt	cggttggcgc	gcaacgggtt	ctaggctgca	ggcagctcga	120
ggaccgcggg	ccccgccccg	gctcggcctg	gcagatagca	gaggcagcag	gccgtgccgg	180
gggggcatgt	tgctgtaacc	agtggcccag	gggatgttac	ggtggacagt	gcacctggag	240
ggcgggcccc	gcagggtgaa	ccatgctgca	gtggctgtcg	ggcatcgggt	atactccttc	300
gggggttact	gctctggtga	agactatgag	acactgcgtc	agatagatgt	gcacattttc	360
aatgcagtgt	ccttgcggtg	gacaaagctg	cccccggtga	agtctgccat	ccgtgggcaa	420
gtcctgtgtg	taccctacat	gcgctatgga	cactcaaccg	tcctcatcga	cgacacagtc	480
ctcctttggg	gcgggcgga	tgacaccgaa	ggggcctgca	atgtgctcta	tgcccttgac	540
gtcaatacgc	acaagtgggt	cacaccccga	gtgtcagggg	cagttcctgg	ggccccggat	600
ggacattcag	cctgtgtcct	aggcaagatc	atgtacattt	ttgggggcta	cgagcagcag	660
gcggactgtt	tttccaatga	cattcacaag	ctagatacca	gcaccatgac	atggactctt	720

atctgtacaa	agggcagccc	tgcacgctgg	agggacttcc	actcagccac	aatgctggga	780
agtcacatgt	atgtcttttg	gggcccgtgcc	gaccgctttg	ggccattcca	ttccaacaat	840
gagatttact	gcaaccgcat	tcgagtcttt	gacaccagaa	ctgaggcttg	gctggactgt	900
cccccgactc	cagtgtctgc	tgaggggccc	cggagccact	cggccttttg	ctacaatggg	960
gagctgtaca	tctttggtgg	ttataatgca	aggctgaacc	ggcacttcca	tgacctctgg	1020
aagtttaatc	ctgtgtcctt	tacctggaaa	aagattgaac	cgaaggggaa	ggggccatgt	1080
ccccgcgggc	gccagtgtcg	ctgtattgtt	ggtgacaaga	ttgtcctctt	tgggggtacc	1140
agtccatctc	ctgaggaagg	cctgggagat	gaatttgacc	ttatagatca	ttctgactta	1200
cacatttttg	acttttagcc	tagtctgaag	actctgtgca	aactggccgt	gattcagtat	1260
aacctagacc	agtccctgtt	gcctcatgat	atcaggtggg	agctgaatgc	catgaccacc	1320
aacagcaata	tcagtcgccc	catcgtctcc	tcccatgggt	aggaggaagt	ttctgccacc	1380
tcccctcctg	agcctgtctg	catcttccact	gccccctgcc	atctgtcacc	cacctgctcc	1440
tttgaccctt	ggacttggtg	tacctccatg	tggagttggt	gggcgagagg	tggtctctgt	1500
gctgtgaatt	cagtggggag	ctgtagcggg	gtgggggcta	ggttcctccc	cccttggggc	1560
gagggccctt	tcccccttgg	gctctgtccc	catccacctc	ctttcagctg	ctcctgggce	1620
tcagctctgc	ccagggccag	ccaggttctg	ctgggaaggg	aaggggaatg	ggagaaggga	1680
gaagcaagca	gtgtctgagc	ctcaggagct	tccccctccc	cctttgccta	tccccctccc	1740
tctgcttgag	ccttgagcct	tgactgggag	ctgaaaggag	ttgcagctgt	tggtcatgaga	1800
cctccttctc	cccgtcttgg	ggaggtgggg	accagcagat	aaatcccacc	cttccttgag	1860
ctgtcgtctg	actctgaagt	tcagccagct	cagattttat	aaaaattaat	taaaatctcc	1920
aaaaaaaaa						1930

<210> 684
 <211> 1576
 <212> DNA
 <213> Homo sapiens

<400> 684		
tagaggggaag	cctgcaaccg gaagtgaagg cagatttccc tccttcgtcg ctgttgctgc 60	
cgccatacgc	gctctccctg tttagttatg gcagagaacg atgtggacaa tgagctcttg 120	
gactatgaag	atgatgaggt ggagacagca gctgggggag atggggctga gggccctgcc 180	
aagaaggatg	tcaagggtct ctatgtctcc atccacagct ctggctttcg tgacttcctg 240	
ctcaagccag	agttgctccg ggccattgtc gactgtggct ttgagcatcc gtcagaagtc 300	
cagcatgagt	gcatccctca ggccattctg ggaatggatg tcctgtgcca ggccaagtgc 360	
ggcatgggaa	agacagcagt gtttgtcttg gccacactgc aacagctgga gccagttact 420	
gggcagggtg	ctgtactggg gatgtgtcac actcgggagt tggcttttca gatcagcaag 480	
gaatatgagc	gcttctctaa atacatgccc aatgtcaagg ttgctgtttt ttttgggtgg 540	
ctgtctatca	agaaggatga agaggtgctg aagaagaact gcccgcataat cgtcgtgggg 600	
actccaggcc	gtatcctagc cctggctcga aataagagcc tcaacctcaa acacattaaa 660	
cactttattt	tggtatgaatg tgataagatg cttgaacagc tcgacatgcg tcgggatgtc 720	
caggaaattt	ttcgcattgac ccccaacgag aagcaggtca tgatgttcag tgctaccttg 780	
agcaaagaga	tccgtccagt ctgccgcaag ttcattgcaa atccaatgga gatcttcgtg 840	
gatgatgaga	cgaagttagc gctgcatggg ttgcagcagt actacgtgaa actgaaggac 900	
aacgagaaga	accggaagct ctttgacctt ctggatgtcc ttgagttcaa ccagggtggtg 960	
atctttgtga	agtctgtgca gcggtgcatt gccttgcccc agctactagt ggagcagaac 1020	
ttcccagcca	ttgccatcca ccgtgggatg ccccgaggag agaggctttc tcggtatcag 1080	
cagtttaaa	ggtttcaacg acgaattctt gtggctacca acctatttgg ccgaggcatg 1140	
gacatcgagc	gggtgaacat tgcttttaat tatgacatgc ctgaggattc tgacacctac 1200	
ctgcatcggg	tggccagagc agggccggtt ggccaccaag gcttggctat cacatttctg 1260	
tccgatgaga	atgatgccaa gatcctcaat gatgtgcagg atcgctttga ggtcaatatt 1320	
agtgagctgc	ctgatgagat agacatctcc tcctacattg aacagacacg gtagaagact 1380	
cgcccatctt	ggaatgtgac cgtctgtcct tcaggagagg acaccagggg gggggtgaag 1440	
gagacactac	tgccccacc cctgacagcc cccaccccat ggcttccatc ttttgcatca 1500	
ccaccactcc	tgaaccccca tttctgattt gtcagaattt ttttttaaca aaactaaaaa 1560	
tgaaaaaaaa	aaaaaa	1576

<210> 685
 <211> 1576
 <212> DNA

<213> Homo sapiens

<400> 685

tagaggggaag	cctgcaaccg	gaagtgaagg	cagatttccc	tccttcgctcg	ctgttgetgc	60
cgccatacgc	gctctccctg	tttagttatg	gcagagaacg	atgtggacaa	tgagctcttg	120
gactatgaag	atgatgaggt	ggagacagca	gctgggggag	atggggctga	ggcccctgcc	180
aagaaggatg	tcaagggtc	ctatgtctcc	atccacagct	ctggctttcg	tgacttctcg	240
ctcaagccag	agttgctccg	ggccattgtc	gactgtggct	ttgagcatcc	gtcagaagtc	300
cagcatgagt	gcatccctca	ggccattctg	ggaatggatg	tcctgtgcc	ggccaagtcg	360
ggcatgggaa	agacagcagt	gtttgtcttg	gccacactgc	aacagctgga	gccagttact	420
gggcagggtg	ctgactgggt	gatgtgtcac	actcgggagt	tggtttttca	gatcagcaag	480
gaatatgagc	gcttctctaa	atacatgccc	aatgtcaagg	ttgctgtttt	ttttgggtgt	540
ctgtctatca	agaaggatga	agagggtgctg	aagaagaact	gcccgcata	cgctgtgggg	600
actccaggcc	gtatcctagc	cctgggtcga	aataagagcc	tcaacctcaa	acacattaaa	660
cacttttatt	tggatgaatg	tgataagatg	cttgaacagc	tcgacatgcg	tcgggatgtc	720
caggaatatt	ttcgcatgac	ccccacgag	aagcagggtca	tgatgttcag	tgctaccttg	780
agcaaagaga	tccgtccagt	ctgccgcaag	ttcatgcaag	atccaatgga	gatcttcgtg	840
gatgatgaga	cgaagttgac	gctgcatggg	ttgcagcagt	actacgtgaa	actgaaggac	900
aacgagaaga	accggaagct	ctttgacctt	ctggatgtcc	ttgagttcaa	ccagggtggtg	960
atctttgtga	agtctgtgca	gcgggtgcatt	gccttggccc	agctactagt	ggagcagaac	1020
ttcccagcca	ttgccatcca	ccgtgggatg	ccccaggagg	agaggctttc	tcgggtatcag	1080
cagtttaag	atthtcaacg	acgaattctt	gtggctacca	acctatttgg	ccgaggcatg	1140
gacatcgagc	gggtgaacat	tgcttttaat	tatgacatgc	ctgaggattc	tgacacctac	1200
ctgcatcggg	tggccagagc	aggccggttt	ggcaccaggg	gcttggctat	cacattttgtg	1260
tccgatgaga	atgatgccaa	gacatctcaat	gatgtgcagg	atcgctttga	ggccaatatt	1320
agtgaagctg	ctgatgagat	agacatctcc	tcctacattg	aacagacacg	gtagaagact	1380
cgcccattht	ggaatgtgac	cgtctgtcct	tcaggagagg	acaccagggt	gggggtgaag	1440
gagacactac	tgccccacc	cctgacagcc	cccaccccat	ggcttccatc	ttttgcatca	1500
ccaccactcc	tgaaccccc	tttctgattt	gtcagaattt	ttttttaaca	aaactaaaaa	1560
tgaaaaaaa	aaaaaa					1576

<210> 686

<211> 1464

<212> DNA

<213> Homo sapiens

<400> 686

actagtctta	gacgcgagc	ggccgctcgc	gatctataat	gcctcttctg	aagcagccat	60
cccggcctct	tggtactgct	gacccagacc	aggctacagg	gatcgattgg	agctgtcctt	120
ggggctgtaa	ttggccccag	ctgagcaggg	caaacactga	gggtcaactac	aagccacagg	180
cccttcccc	agctcagtt	cacagctgcc	ctgttgacag	gaggcggtgg	cccttctgtt	240
gctagaccga	gcctgtggga	tataccaagg	cagaggagcc	catagccatg	aggagcctcg	300
ggggcctgct	cttgtgtctg	agcgcctgcc	tggcggtgag	cgctggccct	gtgccaacgc	360
cgcccgacaa	catccaagtg	caggaaaact	tcaatatctc	tcggatctat	gggaagtgggt	420
acaacctggc	catcggttcc	acctgcccct	ggctgaagaa	gatcatggac	aggatgacag	480
tgagcacgct	ggtgctggga	gaggcgctca	cagaggcgga	gatcagcatg	accagcactc	540
gttggcgga	aggtgtctgt	gaggagacgt	ctggagctta	tgagaaaaca	gatactgatg	600
ggaagttht	ctatcacaaa	tccaaatgga	acataaccat	ggagtcctat	gtggtccaca	660
ccaactatga	tgagtatgcc	atthtctga	ccaagaaatt	cagccgccat	catggaccca	720
ccattactgc	caagctctac	ggcgggcgcc	cgcagctgag	ggaaactctc	ctgcaggact	780
tcagagtggg	tgcccagggt	gtgggcatcc	ctgaggactc	catcttcacc	atggctgacc	840
gagggtgaat	tgtccctggg	gagcaggaac	cagagcccat	cttaatccc	agagtccgga	900
gggtgtgtct	acccaagaa	gaggaaggat	caggggtgtg	gcaactggta	actgaagtca	960
ccaagaaaga	agatttctgc	cagctgggct	actcgccgg	tccttgcatt	ggaatgacca	1020
gcaggatatt	ctataatggt	acatccatgg	cctgtgagac	tttccagtac	ggcggtgca	1080
tgggcaacgg	taacaacttc	gtcacagaaa	aggagtgtct	gcagacctgc	cgaactgtgg	1140
cggcctgcaa	tctccccata	gtccggggcc	cctgccgagc	cttcatccag	ctctgggcat	1200
ttgatgtgtg	caaggggaag	tgctgtctct	tcccctacgg	gggctgccag	ggcaacggga	1260
acaagttht	ctcagagaag	gagtgcagag	agtactgcgg	tgtccctggg	gatggtgatg	1320
aggagctgct	gcgttctcc	aactgacaac	tggccggtct	gcaagtcaga	ggatggccag	1380

tgtctgtccc ggggtcctgt ggcaggcagc gccaaagcaac ctgggtccaa ataaaaacta 1440
aattgtaaac tcctaaaaaa aaaa 1464

<210> 687
<211> 1905
<212> DNA
<213> Homo sapiens

<400> 687
ccaggcgggc gctcggggag ttcccctcca caggagctat caggattttt ctggcaccac 60
gtttaactct ttttcgtgct tttggggggg acagatctgg gggacagatt tatctgttga 120
atactcttgg gcaggaaaac catgtaaaac ctctggaagc agcatcagga cagcagagca 180
gagcccccgt cctcactgct cacttgccaca gaaactccat ctggactcgg atgcttttac 240
tgaagaccca tctagcttca atcatcttta gaggccatcc attctggaga gacctggcgt 300
ttgcagttgc ctctgtggc cgtgttttcc tgtcattctg ttcccaggcc ttctattcag 360
gcggttgaag ggtgtggact ttggaatggg gtttgctggt ctccgggaac ttgcttcctt 420
tcccctggctg gcgctgtcag gaaggacat ctgaaggctg caatttggtt ttatggaggc 480
agggtgctggc ctggcctgga tcttccacca tgttcctggt gctgcctttt gatagcctga 540
ttgtcaacct tctgggcatc tcccctgactg tctctctcac cctccttctc gttttcatca 600
tagtgccagc catttttggg gtctcctttg gtatccgcaa actctacatg aaaagtctgt 660
taaaaatctt tgcgtgggct accttgagaa tggagcgagg agccaaggag aagaaccacc 720
agctttacaa gccctacacc aacggaatca ttgcaaagga tcccacttca ctagaagaag 780
agatcaaaga gattcgtcga agtggttagta gtaaggctct ggacaacact ccagagtctg 840
agctctctga cattttctac ttttgccgga aaggaaatgga gaccattatg gatgatgagg 900
tgacaaagag attctcagca gaagaactgg agtcctggaa cctgctgagc agaaccaatt 960
ataacttcca gtacatcagc ctccggctca cggctcctgtg ggggttagga gtgctgattc 1020
ggtactgctt tctgctgccg ctccagatag cactggcttt cacagggatt agccttctgg 1080
tggtggggcac aactgtggtg ggatacttgc caaatgggag gtttaaggag ttcatgagta 1140
aacatgttca cttaatgtgt taccggatct gcgtgcgagc gctgacagcc atcatcacct 1200
accatgacag ggaacacaga ccaagaaatg gtggcatctg tgtggccaat catacctcac 1260
cgatcgatgt gatcatcttg gccagcgatg gctattatgc catggtgggt caagtgcacg 1320
ggggactcat ggggtgtgatt cagagagcca tggtaaggc ctgcccacac gtctgggtttg 1380
agcgctcggg agtgaaggat cgccacctgg tggctaagag actgactgaa catgtgcaag 1440
ataaaagcaa gctgcctatc ctcatcttcc cagaaggaaac ctgcatcaat aatacatcgg 1500
tgatgatgtt caaaaaggga agttttgaaa ttggagccac agtttaccct gttgctatca 1560
agtatgacc tcaatttggc gatgccttct ggaacagcag caaatacggg atggtgacgt 1620
acctgctgcg aatgatgacc agctgggcca ttgtctgcag cgtgtggtac ctgcctccca 1680
tgactagaga ggcagatgaa gatgctgtcc agtttgcgaa tagggtgaaa tctgccattg 1740
ccaggcaggg aggacttgtg gacctgctgt gggatggggg cctgaagagg gagaagggtga 1800
aggacacgtt caaggaggag cagcagaagc tgtacagcaa gatgatcgtg ggaaccaca 1860
aggacaggag ccgctcctga gcctggcttc agcttgcttg gggcc 1905

<210> 688
<211> 1882
<212> DNA
<213> Homo sapiens

<400> 688
aagaaccctg aggaacagac gttccctcgc ggccctggca cctccaaccc cagatatgct 60
gctgctgctg ctgctgcccc tgccttgggg gagggagagg gtggaaggac agaagagtaa 120
ccggaaggat tactcgtga cgatgcagag ttccgtgacc gtgcaaggag gcatgtgtgt 180
ccatgtgcgc tgcctcttct cctacccagt ggacagccag actgactctg acccagttca 240
tggctactgg ttccgggcag ggaatgatat aagctggaag gctccagtgg ccacaaacaa 300
cccagcttgg gcagtgcagg aggaaactcg ggaccgatcc cactccttg gggaccacaa 360
gaccaaaaat tgcaccctga gcacagaga tgccagaatg agtgatgcgg ggagatactt 420
ctttcgtatg gagaaaggaa atataaaatg gaattataaa tatgaccagc tctctgtgaa 480
cgtgacagcc ttgaccaca ggcccaacat ccttatcccc ggtaccctgg agtctggctg 540
cttcacgaat ctgacctgct ctgtgccctg ggctgtgag caggggacgc cccctatgat 600

ctcctggatg	gggacctctg	tgtccccct	gcacccctcc	accaccgct	cctcagtgt	660
cacctcacc	ccacagcccc	agcaccacgg	caccagcctc	acctgtcagg	tgaccttgcc	720
tggggccggc	gtgaccacga	acaggacccat	ccaactcaat	gtgtcctacc	ctcctcagaa	780
cttgactgtg	actgtcttcc	aaggagaagg	cacagcatcc	acagctctgg	ggaacagctc	840
atctctttca	gtcctagagg	gccagtctct	gcgcttggtc	tgtgctgttg	acagcaatcc	900
ccctgccagg	ctgagctgga	cctggaggag	tctgacctg	tacctctcac	agccctcaaa	960
ccctctggta	ctggagctgc	aagtgcacct	gggggatgaa	ggggaattca	cctgtcgagc	1020
tcagaactct	ctgggttccc	agcacgtttc	cctgaacctc	tccttgcaac	aggagtacac	1080
aggcaaaatg	aggcctgtat	caggagtgtt	gctgggggag	gtcgggggag	ctggagccac	1140
agccctggtc	ttcctctcct	tctgtgtcat	cttcattgta	gtgaggctct	gcaggaagaa	1200
atcggcaagg	ccagcagcgg	acgtgggaga	cataggcatg	aaggatgcaa	acaccatcag	1260
gggctcagcc	tctcagggtg	acctgactga	gtcctgggca	gatgataacc	cccacacca	1320
tggcctggct	gccactcct	caggggagga	aagagagatc	cagtatgcac	ccctcagctt	1380
tcataagggg	gagcctcagg	acctatcagg	tcaagaagcc	accaacaatg	agtactcaga	1440
gatcaagatc	cccaagtaag	aaaatgcaga	ggctcgggct	tggttgaggg	ttcacgacct	1500
ctccagcaaa	ggagtctgag	gctgattcca	gtagaattag	cagccctcaa	tgctgtgcaa	1560
caagacatca	gaacttatcc	ctcttgtcta	actgaaaatg	catgcctgat	gaccaaactc	1620
tccttttccc	catccaatcg	gtccacactc	cccgccttgg	cctctggtac	ccaccattct	1680
cctctgtact	tctctaagga	tgactacttt	agattccgaa	tatagtgaga	ttgtaacgtg	1740
tttgtctctc	tgtgcctggc	ttatttctact	caacataaca	tcctctaagt	tcattctgtg	1800
tgtttccaat	gacagagtaa	tgtactgaat	aattcaaaat	agctaaaaga	gaggagttaa	1860
aatgttgtca	ccaaaaaaa	aa				1882

<210> 689

<211> 1882

<212> DNA

<213> Homo sapiens

<400> 689

aagaaccctg	aggaacagac	gttccctcgc	ggccctggca	cctccaaccc	cagatatgct	60
gctgtgtgct	ctgtgcccc	tgctctgggg	gagggagagg	gtggaaggac	agaagagtaa	120
ccggaaggat	tactcgctga	cgatgcagag	ttccgtgacc	gtgcaaggag	gcatgtgtgt	180
ccatgtgcgc	tgctccttct	cctaccagct	ggacagccag	actgactctg	accagtttca	240
tggctactgg	ttccgggcag	ggaatgatat	aagctggaag	gctccagtgg	ccacaaacaa	300
ccagcttgg	gcagtgcagg	aggaactcgc	ggaccgattc	cacctccttg	gggaccacaa	360
gacaaaaaat	tgacccctga	gcacagagaa	tgccagaatg	agtgatgcgg	ggagatactt	420
ctttcgatg	gagaaaggaa	atataaaatg	gaattataaa	tatgaccagc	tctctgtgaa	480
cgtgacagcc	ttgaccacaa	ggcccaacat	ccttatcccc	ggtaccctgg	agtctggctg	540
cttccagaat	ctgacctgct	ctgtgccctg	ggcctgtgag	caggggacgc	cccctatgat	600
ctcctggatg	gggacctctg	tgtccccct	gcacccctcc	accaccgct	cctcagtgtc	660
cacctcacc	ccacagcccc	agcaccacgg	caccagcctc	acctgtcagg	tgaccttgcc	720
tggggccggc	gtgaccacga	acaggacccat	ccaactcaat	gtgtcctacc	ctcctcagaa	780
cttgactgtg	actgtcttcc	aaggagaagg	cacagcatcc	acagctctgg	ggaacagctc	840
atctctttca	gtcctagagg	gccagtctct	gcgcttggtc	tgtgctgttg	acagcaatcc	900
ccctgccagg	ctgagctgga	cctggaggag	tctgacctg	tacctctcac	agccctcaaa	960
ccctctggta	ctggagctgc	aagtgcacct	gggggatgaa	ggggaattca	cctgtcgagc	1020
tcagaactct	ctgggttccc	agcacgtttc	cctgaacctc	tccttgcaac	aggagtacac	1080
aggcaaaatg	aggcctgtat	caggagtgtt	gctgggggag	gtcgggggag	ctggagccac	1140
agccctggtc	ttcctctcct	tctgtgtcat	cttcattgta	gtgaggctct	gcaggaagaa	1200
atcggcaagg	ccagcagcgg	acgtgggaga	cataggcatg	aaggatgcaa	acaccatcag	1260
gggctcagcc	tctcagggtg	acctgactga	gtcctgggca	gatgataacc	cccacacca	1320
tggcctggct	gccactcct	caggggagga	aagagagatc	cagtatgcac	ccctcagctt	1380
tcataagggg	gagcctcagg	acctatcagg	tcaagaagcc	accaacaatg	agtactcaga	1440
gatcaagatc	cccaagtaag	aaaatgcaga	ggctcgggct	tggttgaggg	ttcacgacct	1500
ctccagcaaa	ggagtctgag	gctgattcca	gtagaattag	cagccctcaa	tgctgtgcaa	1560
caagacatca	gaacttatcc	ctcttgtcta	actgaaaatg	catgcctgat	gaccaaactc	1620
tccttttccc	catccaatcg	gtccacactc	cccgccttgg	cctctggtac	ccaccattct	1680
cctctgtact	tctctaagga	tgactacttt	agattccgaa	tatagtgaga	ttgtaacgtg	1740
tttgtctctc	tgtgcctggc	ttatttctact	caacataaca	tcctctaagt	tcattctgtg	1800
tgtttccaat	gacagagtaa	tgtactgaat	aattcaaaat	agctaaaaga	gaggagttaa	1860
aatgttgtca	ccaaaaaaa	aa				1882

<210> 690
 <211> 403
 <212> DNA
 <213> Homo sapiens

<400> 690
 cagggtggggc atggccttct ccagctgctt ttccttttcg gccacctcga gggcggaaca 60
 gtgcgcaggc tgcaccagct tgtaccaga gccagcacc acccggtca ggcctcgtg 120
 gctgctcatc tcaactctca ggttctgcgg gggaggaggc aggaggatgc ggatgttgct 180
 gacccttggg ggactccac agatgtgctt gaagtttcac gggacccac taacttgctc 240
 ccaaggagtt ccctgtcccc atgactccca aagaatccag ggcattccaa aagccccac 300
 aggcagagag ttcctggctg ggccacagag agtgccattt ccttggctga gaagccctgc 360
 tcatgtgcga ggccagccct ccccggtgg gccacacct ggg 403

<210> 691
 <211> 417
 <212> DNA
 <213> Homo sapiens

<400> 691
 tatcatctca caagtgcacg ccaaggctcag tgagtgtgag aagggccagc gcctcagga 60
 gatcgcaagg aagatggacc tgaagtcttc cagcaaacctc aagaacgggc tcaccttccg 120
 caaggaagac atgcctcagc ggcagctcca cctggagggc atgctatgct ggaagaccac 180
 atcagggcgc ttgaaagata tcctggctat cctgctgacc gacgtacttt tgctgctaca 240
 agaaaaagat cagaaatagc tctttgcttc tgtggactca aagccaccgc tcactcgtt 300
 acaaaagctc atcgtgaggg aagtggccaa cgaggagaaa gcgatgttta tgatcagcgc 360
 ctcttgcga gggccggagt gtattgcggc cgctcagag gatccaagca aacagaa 417

<210> 692
 <211> 365
 <212> DNA
 <213> Homo sapiens

<400> 692
 acccttcgtt atcattcaag tccttctggc cagataaaga gatgaccca gggaacatcc 60
 tgaccaggcc ggcttctctg atggctgtgt tcaatgccat gccaccatc tgcttcggat 120
 ttcagtgcca cgtcagcagt gtgcccgtct tcaacagcat gcagcagcct gaagtgaaga 180
 cctgggggtg agtgggtgaca gctgccatgg tcatagccct cgctgtctac atggggacag 240
 gcatctgtg ctctctgacc tttggagctg ctgtggatcc tgacgtgctc ctgtcctatc 300
 cctcggagga catggccgtg gccgttgcgc gagccttaat catcctgagc gtgctcacct 360
 gtatt 365

<210> 693
 <211> 2663
 <212> DNA
 <213> Homo sapiens

<400> 693
 cattcacctg gtggaattct cccaccccc ccagcatcaa taaagtgtca taaacagaat 60
 attcttcatt tttgtgcatg tcctggggcc agccaggcag ggactgattc cccccacaa 120
 ctccccagca cagtctggag aatggcatgg attcagacaa acacttttat attaaaagct 180

aggggttagc	aggactggag	tacgcaggct	gcccacaagt	tccatagcttg	caggctcttg	240
ctctcgaggt	cccacacgcc	tgatgtcaat	cacctgaagc	cgctccagg	cagtctggag	300
gatttccacc	acggcttctt	ccttctcgtc	accctcctct	ggcatattccg	actcaggag	360
ctggaaggcc	tggctcatgt	aggtgttcac	tgtctgcttg	tccaggctgg	ggtcgatggt	420
catcaggccc	cctcgagct	tgggcagagt	cacttccctca	tggagttcta	tgccaagctc	480
ctgcttttagc	tgctgtaagt	actcgtcctt	ctcatccatg	tattgttccc	agagtttttg	540
cacaaagggc	tcactctggc	cctcctcatc	ctccataaac	agtgaagcgt	agttgagcaa	600
gtctgcattg	ctgctgctgg	gatgccagcc	ccttgccctc	atcagctcct	ggatttgctc	660
ttctgtcttg	agagggaagg	tactcttgag	gacagtgttg	aactgctcca	tggtagtag	720
ccctcgttc	tgactgtcag	catttgtcat	ctccttcagc	agctgggcta	ctgtctcctt	780
ctgggtgaca	tacacattct	cactccgctt	tcccatcaag	actgcataga	actgactcat	840
aacctcgttg	gagtggaaga	tcttgatatt	ttcaaaaata	gtataagccc	aggccatggc	900
atcactgggc	ccaaagcgat	gctccaggaa	attgaagaag	aaatctggga	acgtctcttt	960
ctgctcctca	gcaagacgtt	ccttccaggg	atccttgagg	agggttgacca	cgctcttctt	1020
gcttggcttc	ttgttctcca	cgaggccatc	aaaccgaaga	aaagcaggga	tggcttcccc	1080
atagccctag	gagggaggat	atcagctcat	ctctggaccc	atctgtggcc	ccacccccaa	1140
tcagggaaga	tccccagttg	gttccccaaa	agcttgtctg	agcagcagg	catggctgtt	1200
ctgactctgg	cccaagcccc	actcctgggg	cctcccctac	cagaccagg	aagaagtctt	1260
tctcccgag	cagccccgaa	ccaatctctt	ccaggagcac	gtccaccagc	tggctcgctgt	1320
tcttgccttc	agccagcatc	tgccagcgct	ctgggcccc	agccaccaca	tctgcatgtg	1380
gggagaggga	gctggagtct	gggcccacat	gtaagcagga	cctggggccc	tgccggctgc	1440
cctcaccttt	gcacttggtc	cagtcaggcc	gcggcggtga	agtgcgtgg	atctcctgca	1500
gctcagagaa	gaattggctc	cgttccttca	gcgtgctcat	gtgcagctgc	atgaggatct	1560
catgtcctt	gcgaacctcc	tcgtagctgg	ctctcagggt	gtccagctgt	gggcaaggac	1620
attggccctg	gccccccacc	tgtgagaccc	cgctcctacc	tcctggccct	gcctgcctgc	1680
cagcacctgc	tcctgaagat	ccttgttggg	cttctcctgc	atttcaaagt	ccctcctggg	1740
gaccacatct	ccaaagtggg	ccttcatgtt	gttgagttcc	atctgcgtgc	gggtcaggtc	1800
ttgccgggtg	atcttaagag	ccagggttaa	cttcacagg	tcctcccccc	agatgcctgg	1860
cgactgggct	aatgacatgt	cctcccgtg	gtaccgcagc	tcattcaggt	ctgcgatgag	1920
gatcttacag	gcattctcgt	cactgaggta	gtgcaggta	tcctcagcca	agttcttctt	1980
cagtttggct	acctcgctct	gcaatgaaat	cttctcctca	ttctttttgt	cgatgagttt	2040
tagcaagttc	atcttctctt	tcttgagcag	ggagatttca	tatttctcct	cagctctcat	2100
ggccaggatc	ctctcattgc	agtcctcatt	cacagtga	agcttggcct	tcaggggctc	2160
cagagcccga	atcttctccc	tttgggtggc	agcgctcttc	gtttctgggt	ggaatctgtg	2220
cccagggtcca	gcaggaggag	ctccttgctg	aggtagtttt	ccagttcttc	caagtactgg	2280
ggcttggcag	tgcgaaaagg	gtgctgctgg	cagctccagc	gtccttcgtt	tctgaagaag	2340
cttgcgattc	tgggtgctct	tgtcttctgt	gagaaaggat	tcgtctatgg	tcactcctga	2400
aggccgtggc	tgtaatcggt	ttgctagcac	gtaacgtctt	cactgggcta	aatcagcccc	2460
attctaacca	ttgactctgt	ggtgctggag	ccctagatca	atggtcagag	gccagcagga	2520
ggtgcagagg	tcgggatcaa	gtgccatttc	cctctctaga	agtactcaaa	ccctcatctc	2580
tgccctcatc	cctgccagcg	cctacctga	cgcgagcag	aagctgtggt	accgcgactg	2640
ctggcaggcc	atgaccacag	ggc				2663

<210> 694

<211> 2121

<212> DNA

<213> Homo sapiens

<400> 694

gaggcggaat	tcgggtgaccg	tctggctgct	ggagcagaag	ctgcaggctc	gctgcagggt	60
ggaggaggtg	tggctggcag	agctgcagg	cccctgtccc	caggcaccac	ccctggagcc	120
cggagcccag	gccctggcct	acaggcccgt	ctccaggaa	atcgatgtcc	caaagaggaa	180
gtcggacgca	tggaatgg	atgagatgat	ggcggccatg	gtgctgacgt	ccctgtcctg	240
cagccctgtt	gtacagagtc	ctccggggac	cgaggccaac	ttctctgctt	cccgtgcggc	300
ctgcgaccca	tggaaggaga	gtggtgacat	ctcgacagc	ggcagcagca	ctaccagcgg	360
tcactggagt	gggagcagtg	gtgtctccac	cccctcgccc	ccccacccc	aggccagccc	420
caagtatttg	ggggatgctt	ttggttctcc	ccaaactgat	catggctttg	agaccgatcc	480
tgaccctttc	ctgctggacg	aaccagctcc	acgaaaaaga	agaactctg	tgaagggtgat	540
gtacaagtgc	ctgtggccaa	actgtggcaa	agttctgcgc	tccattgtgg	gcatcaaacg	600
acacgtcaaa	gccctccatc	tgggggacac	agtggaactc	gatcagttca	agcgggagga	660
ggattttctac	tacacagagg	tgcagctgaa	ggagggaatc	gctgctgctg	ctgctgctgc	720

tgccgcaggc	acccagtc	ctgggactcc	cacctccgag	ccagctccca	ccccagcat	780
gactggcctg	cctctgtctg	ctcttccacc	acctctgcac	aaagcccagt	cctccggccc	840
agaacatcct	ggcccggagt	cctccctgcc	ctcaggggct	ctcagcaagt	cagctcctgg	900
gtccttcttg	cacattcagg	cagatcatgc	ataccaggta	tggggcgggg	ctcgctggag	960
gctcatgtct	atagctgact	catcacgggc	cagcttgatt	acaggctacc	gaccaccctg	1020
atggaaggct	gagccctttg	gccaaattgc	taatctcttc	tacaaggaaa	caaaaggaaa	1080
ccgaattcac	tgctcaataa	atgtgggaat	tcctggagtt	atctacattg	gcagctgtca	1140
tgagtgggta	ctaggaatct	agctaaatcc	ctaagtaact	gggcgatgga	tttgggtggg	1200
ggaattgtca	cacctctgct	tataagagag	gatggagtcg	tgtagttggg	cttcccacgt	1260
gacgtctagg	tcctagaatt	gtgttctgtg	gacagacagt	ccagcacgca	tgttttgaat	1320
acttccctacg	ggccaagaat	tggactaaga	ctttcagggt	gaagaaggct	tagtccctgc	1380
ccttggtggag	ggcatggttc	agattgagag	agaaatgaat	atgtaactat	ggttaattat	1440
aataaccagt	caaagtacta	attactagag	gcatgagaag	gtgtttagg	taccagaggg	1500
accaacctat	tttgcccttg	tggatgagaa	acttatcaca	gagggtgaca	tttaggatgg	1560
ttctcgctgc	atgtagtagg	tactcaagga	acatgcagcc	ttgctgtgtg	ctgatatttc	1620
ttaaaattct	tttgtgctta	ttttatcagt	ctgtgggcca	atttgcaaat	tagttattaa	1680
aagggtattgc	tttcagtgag	aaagctttat	gaaatgggcc	agccctcctc	cttgtagaa	1740
tgagtggccg	cttagcgatt	tcagtgttgg	cccacttgga	gctgtggctg	acctatgggg	1800
cccagacatg	tagctgggtg	tttcacaaat	agccctgaac	ctggataccc	atgagcacac	1860
tactactctc	aagcagttgc	tggaaagatcc	catatcttat	cccagccatg	ccccctagac	1920
gcagaaggct	tggggcctct	tttggcacgt	gccatggcat	gttcttggtg	ggtagatccag	1980
ttgagaagtt	aaatcttctg	cggtgattaa	gtcatgaggc	tagcacgtag	accagcgctg	2040
aggggaagggt	tccaggatga	gattggagcc	ttgcaataag	ggagactact	gcaaggcatt	2100
ggatgatact	ccagtgttgg	a				2121

<210> 695

<211> 413

<212> DNA

<213> Homo sapiens

<400> 695

tttcgtttcg	tgctgattct	aactcgccct	gtttcccttag	catctgttcc	ttcagtaggg	60
aacttttcat	gcgctcctgt	tcactagtgt	ccaaagctct	cagggttcgg	gcataaagga	120
cgacaatgtc	actgtgcctg	gctttcttgt	tgactcgggg	acattttcgt	acttgctcctt	180
taagccacgt	ggaaatgcac	ctatacccaa	agagatgccc	acagcgtaat	gctgagagcc	240
gggtgtcccc	agcattgggc	cactgttcca	gacatattgt	acaagtgtcc	ccttcttcct	300
catccataga	agcagaaggt	agcagaggct	cagacttctg	gggagatggc	tgtttgggga	360
gggtcttgcc	tccatcgata	catgtaactt	cttgctctgc	tgagacacct	gcc	413

<210> 696

<211> 1072

<212> DNA

<213> Homo sapiens

<400> 696

gggggcggcg	agaggaaacg	cggcgcggg	ccgggcccgg	ccctggagat	ggtecccgcc	60
gccgcgggct	ggtgttgtct	cgtgctctgg	ctcccccgct	gcgtcgcgcc	ccacggcttc	120
cgtatccatg	attattttgt	ctttcaagtg	ctgagtcctg	gggacattcg	atacatcttc	180
acagccacac	ctgccaagga	ctttgggtgt	atctttcaca	caaggtatga	gcagattcac	240
cttgtccccg	ctgaacctcc	agaggcctgc	ggggaactca	gcaacgggtt	cttcatccag	300
gaccagattg	ctctgggtgga	gagggggggc	tgctccttcc	tctccaagac	tcgggtgggtc	360
caggagcacg	gcgggcgggc	ggtgatcatc	tctgacaacg	cagttgacaa	tgacagcttc	420
tacgtggaga	tgatccagga	cagtacccag	cgcacagctg	acatccccgc	cctcttctctg	480
ctcggccgag	acggctacat	gatccgcgcg	tctctggaaac	agcatgggct	gccatggggcc	540
atcattttcca	tcccagtcac	tgccaccagc	atccccacct	ttgagctgct	gcaaccgccc	600
tggaacctct	ggtagaagag	tttgtccac	attccagcca	taagtgactc	tgagctggga	660
aggggaaacc	caggaatttt	gctacttgga	atttgagat	agcatctggg	gacaagtggga	720
gccaggtaga	ggaaaagggt	ttgggcgttg	ctaggctgaa	agggaagcca	caccactggc	780

cttcccttcc	ccagggcccc	caaggggtgc	tcattgctaca	agaagaggca	agagacaggc	840
cccagggctt	ctggctagaa	cccgaacaa	aaggagctga	aggcaggtgg	cctgagagcc	900
atctgtgacc	tgtcacactc	acctggctcc	agcctcccct	acccaggggtc	tctgcacagt	960
gaccttcaca	gcagttgttg	gagtgggtta	aagagctggg	gtttggggac	tcaataaacc	1020
ctcactgact	ttttagcaat	aaagcttctc	atcaggggtg	aaaaaaaaaa	aa	1072

<210> 697

<211> 2177

<212> DNA

<213> Homo sapiens

<400> 697

gccacgggtg	agtcgggtcg	tggctgctgc	cggttctctgc	gcgctccgga	ctgaggtggc	60
gtccctgggc	cggaacggcg	tgtcccggcg	tggcgggaag	ccggcactgg	agcgggagcg	120
cactggggcg	gggacgggga	ggcgacggga	ccggacgggt	cccaggtcgc	ccacctgacg	180
gtaccgagag	ggcggcgccc	ctccgagcag	agccgtcccg	gccactcccc	tgggatctga	240
cttggctctt	gcggtcgcgg	gcacctgaa	gccctggggg	gtgctgggct	cctcctggta	300
ggcgcccttt	ccggcgctcc	ggcttggggg	ggtggtggcg	ttgactccag	ccccgcctct	360
ccctggagag	gagggtccca	ctcgctcctt	cggtcctcct	ccctggggcc	gcagcgactc	420
gggcgggctt	cctgcttccc	tgcctgccgg	cggtcccgtt	ggctagaaaa	agtcttcaact	480
tcccaggaga	gccaaagcgt	gtctggccct	aggtgggaaa	agaactggct	gtgacctttg	540
ccctgacctg	gaagggccca	gccttgggct	gaatggcagc	acccacggcc	gcccgtccgg	600
tgtgaccca	cctgctgggt	gctctcttcg	gcattggctc	ctgggctcgc	gtcaatggga	660
tctgggtgga	gctacctgtg	gtgggtcaag	agcttccaga	gggttggagc	ctccccctct	720
acgtctctgt	gcttgtggct	ctggggaacc	tgggtctgct	ggtggtgacc	ctctggagga	780
ggctggcccc	aggaaaggac	gagcaggtcc	ccatccgggt	ggtgcaggtg	ctgggcatgg	840
tgggcacagc	cctgctggcc	tctctgtggc	accatgtggc	cccagtgcca	ggacagttgc	900
attctgtggc	cttcttagca	ctggcctttg	tgtctggcact	ggcatgctgt	gcctcgaatg	960
tcactttcct	gcccttcttg	agccacctgc	caacctcgct	cttacggtca	ttcttccctg	1020
gtcaaggcct	gagtgccctg	ctgcccctgc	tgtctggccct	agtgcagggt	gtgggcccgc	1080
tcgagtgcgc	gccagcccc	atcaacggca	cccctggccc	cccgtctgac	ttccttgagc	1140
gttttccgcg	cagcaccttc	ttctgggcac	tgaactgcct	tctgggtcgc	tcagctgctg	1200
ccttccaggg	tcttctgctg	ctgttgccgc	caccaccatc	tgtaccaca	ggggagttag	1260
gatcaggcct	ccaggtggga	gccccaggag	cagaggaaga	ggtggaagag	tcctcaccac	1320
tgaagagcc	accaagccag	gcagcaggca	ccacccttgg	tccagacctc	aaggcctatc	1380
agcttctatc	agccccagct	gcctgcctgc	tgggcctgtt	ggccgccacc	aacgcgctga	1440
ccaatggcgt	gctgcctgcc	gtgcagagct	tttctctgct	accctacggg	cgtctggcct	1500
accacctggc	tgtggtgctg	ggcagtgctg	ccaatccctc	ggcctgcttc	ctggccatgg	1560
gtgtgctgtg	caggctcctg	gcagggctgg	gcggcctctc	tctgctgggc	gtgttctgtg	1620
ggggctacct	gatggcgctg	gcagtcctga	gcccctgccc	gcccctgggt	ggcacctcgg	1680
cgggggtggg	cctcgtgggt	ctgctcgtgg	tgtgtgtctc	tggcgtgttc	tcctacgtga	1740
aggtggcagc	cagctccctg	ctgcatggcg	ggggccggcc	ggcattgctg	gcagccggcg	1800
tggccatcca	ggtgggctct	ctgctcggcg	ctgttgcctat	gttccccccg	accagcatct	1860
atcacgtgtt	ccacagcaga	aaggactgtg	cagacccctg	tgactcctga	gcctggggcag	1920
gtggggaccc	cgctcccca	cacctgtctt	tccctcaatg	ctgccaccat	gcctgagtg	1980
ctgcagccca	ggaggcccg	acaccgggtac	actcgtggac	acctacacac	tccataggag	2040
atcctggcct	tccaggggtg	gcaagggcaa	ggagcaggct	tggagccagg	gaccagtggg	2100
ggctgtaggg	taagccctg	agcctgggac	ctacatgtgg	tttgcgtaat	aaaacatttg	2160
tatttaaaaa	aaaaaaa					2177

<210> 698

<211> 854

<212> DNA

<213> Homo sapiens

<400> 698

aaatggctaa	atgcaggtag	acactcatgc	agagatcctg	accctaaga	tgaggggacc	60
acactagtct	catcttgggtg	tgacttttca	cattaaggca	gtattcagtc	gtgtggatgc	120

agacatggca	cacaccagat	gttcacagt	gcctggagg	tgggagggt	gagcctggga	180
caaccagagc	aggtaaaaat	ttacatggga	gctcccaaaa	ataaaagagc	tgacagagcg	240
ggagatggag	tgggtgggat	ttgcgggctg	ggtaccaaaa	gctctgcatt	tctcccttca	300
aatccttggc	tgacctgaa	ctgtacaagc	acagggcact	ctccagagga	tcccagggaa	360
acttctgtgg	aggttgaaag	agctgatcag	agatgtcagc	agttgccac	agtagcaaa	420
agaattgcaa	gttccagtc	atcaagttag	aagaccttgg	taaaacttga	tatttccact	480
gaaataccat	aaggatcata	tttaggagt	aagcactgca	tctcaacact	gagagacttg	540
ccctataaag	aatagcaaat	tttagccaac	ccttgctaaa	gatgtctaaa	attaagcctt	600
cccaagggca	aagcgatcca	ccagtacttt	tagtggcccg	gttgatcaac	cgtcatattt	660
tcgcgtagaa	tataaaatcc	caggccttta	ccacatgtaa	cctacatatc	cttttactta	720
ataaaattct	ttttttcgag	ctttacgttt	tcggtgtaca	atgccttctt	gggtgtttat	780
cgatatcaca	cctcttatct	tttgtcattg	gagtaacttt	atgtttcgcc	acgtttctcg	840
tccgatccta	tgac					854

<210> 699

<211> 551

<212> DNA

<213> Homo sapiens

<400> 699

cagctgtagt	gacaatctca	gagcagcttc	tacaccacag	ccatttccag	catgaagatc	60
actgggggtc	tccttctgct	ctgtacagt	gtctatttct	gtagcagctc	agaagctgct	120
agtctgtctc	caaaaaaagt	ggactgcagc	atttacaaga	agtatccagt	gggtggccatc	180
ccctgccccca	tcacatacct	accagtttgt	ggttctgact	acatcaccta	tgggaatgaa	240
tgctacttgt	gtaccgagag	cttgaaaagt	aatggaagag	ttcagtttct	tcacgatgga	300
agttgctaaa	ttctccatgg	acatagagag	aaaggaatga	tattctcatc	atcatcttca	360
tcaccccagg	ctctgactga	gtttctttca	gttatactga	tgatctgggt	gggggacaga	420
gccagattca	gagtaatctt	gactgaatgg	agaaagtttc	tgtgctaccc	ctacaaaccc	480
atgcctcact	gacagaccag	catttttttt	ttaacccgct	aataaaaaaa	taatctccca	540
gaaaaaaaaa	a					551

<210> 700

<211> 1545

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(1545)

<223> n = a,t,c.or g

<400> 700

tgggtggaatt	ccccggcgcc	gcgccatgtg	ggctgcggcg	ggcgggctgt	ggcgctcccg	60
cgcgggtctc	cgggcccctgt	tccgtagccg	cgatgctgcg	ctatttccag	gctgcgagcg	120
gggacttcac	tgctctgctg	tctcctgcaa	gaactggctc	aagaaatttg	cctcgaaaac	180
caaaaaaaaa	gtttgggtatg	aaagtccttc	cttgggttct	cactcgactt	acaaaccatc	240
caagttggaa	ttcctcatga	ggagcacctc	aaagaaaacc	aggaaggaag	accatgcgcg	300
cctgagggcc	ctgaacggcc	tcctctataa	ggcactgaca	gacctgctgt	gtacccctga	360
agtgaagtcag	gagctgtatg	accttaacgt	ggagctctcc	aaggtttccc	tgactccaga	420
cttctcagcc	tgccgagcgt	actggaagac	aacgctctct	gctgagcaga	acgcacacat	480
ggagggctgtc	ctgcagagaa	gtgccgcgca	catgaggcac	cttttgatgt	cccagcagac	540
cctgaggaat	gtgccaccga	tagtgtttgt	tcaagacaag	ggaaatgcag	ctctagctga	600
gcttgatcag	ttactggcag	tcgcagactt	tggaccccgg	gatgaagag	acaactttgt	660
acaaaatgat	ttcagggacc	ctgatgcccc	acaaccctgc	ggcaccacag	agccgaccac	720
aagctccagt	ctgtgtggga	tcgatcatga	ggcgctcaac	aagcagatta	tggagtacaa	780
aaggaggaaa	gataaagggc	tcgggggcct	ggtgtggcag	gggcagggtg	ctgagctgac	840
aacgcagatg	caaaagggga	ggaagagggc	caagccccgc	ctggagcagg	acagctccct	900
caagagttac	ctgtcaggcg	aggaggttga	agatgacctg	gacctgggtg	gtgccccgga	960


```

gtacgaatgc tatgccccgg acacagagga gttggaggca gagagaggag gtggcagaac 1020
agaggatggc cacagctgcg gagcaagcag ggagtagatg gagaggctct gcccatccca 1080
catttgccagg gaaaagcatt ggcaacgcaac gcagcatgtg gcttcattga ggcagttgat 1140
ggagttaaac catctgctct tctgctactt caacattttc tagcttttcc gtgtatctaa 1200
acacaatttg ctacacaagt cactgttttt ttttccatgc actgtgtgta atttaaaaaat 1260
taaattggcca tcttatcaca gattctcaca aaaagaaaat ggtaaaaatg tgtctctgag 1320
atgctggcat ggccacctcc acctgcagag cctgccagg tgccagtgag tgcttggccc 1380
gaggggtcag gccacagcag tggccggggt gagaactgaa cctgcaaac tgggggagaa 1440
agagggtccc cagagcctcc caacccctg gagctgggct ccgtcccttg ggctgctggg 1500
ctggcacngn ggcgcggggc tccatccctg ggtgctgggt cggcc 1545

```

<210> 701

<211> 1441

<212> DNA

<213> Homo sapiens

<400> 701

```

gttaagatgg aatagtttta ttcagcaaac aaaaaacttg ctaattcaga gtatcctcta 60
gtccaccgta atgtgggttt agactacatt tgcaaaatta gggccttgac ggctgaacaa 120
aataaaatcc agaggaaaga ctacagtatc caatcaaaaa ggaagtacta gcaaatgaac 180
cagaataaaa gactttattg tattccatac attcacaggt cacttcaga tttagtaaca 240
acactgcaat gctatgatgc tgtgcggtca tttagcttaa accacagtgt aagtggtag 300
ctctctcctg ctctcttggc ctctagatgt atcacaatac aattcctaac tgtggcctgg 360
caaccaatgc ttatttcatt ggattatttt ctgactggga catgagttca tcgcatcttc 420
ccagaatttt aaagtacctt cccttacatt ataagagatg accaaacact ctagtgtgag 480
ggctgcttca cacactgttc ttatctatca tgattgctct tccttacata cacgtcccgt 540
acagatcagc tacacacggc atggctctga aaccacagct tttgtttctt tggccagaat 600
gcaccctcca ccttgagtgc cgccttaga aacacaggta cttggttctc acagggtgtg 660
catggttgac acaagttcac ctgccccacg gtaaaagctc ttcaaaacct ttgcatgact 720
tgtggggagc agggtcacaa tttgttgcat gtgacctgcc tcagcctcaa aagataagag 780
atcatgagge tccaccgccc cggggtcag gaaacttgat ccacatcgct agggctctgc 840
ctgttaggtt atggatgctc acctgactct ctgaagcaga gggaggctga cacagattag 900
cttttattga aattattaaa gtgcaacttt gtgttttcac tctatcaggc actgaaaagc 960
aagaagcttt taattttttc ttttctataa tgaatatata tttctttact cttatttgta 1020
tctgtaatac acctgcaatt agaaacagca gttaaacata aaacaaagaa cagagcagaa 1080
ggcacagtct aaagagtggg tatcagaaga attttaccat ttacgctcat aggaatacta 1140
aaccaaaccc aatcagacca aactccaaag ccatttgtgt ttacaagtct gcctcttttg 1200
tgtgatagca agtcagtcct ttaaagcaga aacccattt actaaccta catcccaagt 1260
aagcaggcct gtatcagaac caaacagctg tctctttaca tcagaaaatc taagtgatct 1320
gaaagacaat tcatcacaag tgtttccaat tttcttctga gaacatcacc aatcccacta 1380
atgcaaaactc agaacattac ttcagtcaaa tttcgctaaa tgctatagct ttcttcaaat 1440
a 1441

```

<210> 702

<211> 371

<212> DNA

<213> Homo sapiens

<400> 702

```

gcatcagctc gtagggactg agccagggtt ggagtccaga ctgacttgct ggatctgcag 60
ctttctcctt ttcagcactg ctgggttcta tctgtgagaa agatgggctc atggccatga 120
cggtttaggag gtctgcctta tgctagctca tctctccttt gagcgtagcc tgatccttca 180
tcttattttc tcaggcatag cagtgtccat aaaggcccta acaaagactt ggatgcccc 240
agagatgggg agctcaccag tctataaggc tttcagcctt ctccagtga ggctctctgc 300
acagaaatgg ggctcctgcc actcccagaa cacccttcac tggcctgtgt ggggtcctca 360
gaccaccctt c 371

```

<210> 703
 <211> 411
 <212> DNA
 <213> Homo sapiens

<400> 703
 ctggctatct acatggaagg gtaggggttta tgacggcaat acacaataga agatgccttt 60
 ggcaagaccg ctgctctcct tagagagaat atcttgccaa tggctttgct tcatatctgc 120
 gtggggcacc ctctcctttc cttecccaag gctggggact tttctttttc atctcaagat 180
 gaccctctg agctgacagc aggagccaaa gacaaagaat tttcttgct tctcgttatc 240
 tgctcccaac ccgccccgag cactcggtcc ctctctctctt ggcagctatt tttgctcagt 300
 ttctctctg tttcttttac tttgatttat aggggtgaat ttaagaaatc tggtgaggct 360
 aaggactatt tgaccaagc ccagggaccc atagactgtg ggaaactctt a 411

<210> 704
 <211> 631
 <212> DNA
 <213> Homo sapiens

<400> 704
 atgttacgtg gggtgtaaat gtaattgtta atattattta aaaatthttg aaaagtgatt 60
 tttagtgggt gccttatcat atctacatat tattactcca ccattttggg atgttttaggt 120
 cgaatcctgg ttttttcttc ttttgctgtt gtaagtcagt tatattggca attagcctag 180
 gagagattcc tagaaatgag ttactgaga atatgagctt aagagaaagt gaggatttaa 240
 agccagatct gtctgccttc aaatccagcg ctctttatac tgatgtgagt tctcctgtct 300
 tttttaccta tcagaattct agaactctcc cagagaaacc aggcagatac tgctccacac 360
 cggtagctg ctctcacct gggtagtcta gggtaggttg ctccagaatt gtatttctgc 420
 tttttctttt ttttaacttg cagtgggtta ccatccctg gacgagcacc aggttaagtca 480
 gcttgatca ggtcatctg ctttacctga catgagcaca cgttggcata tatttgaca 540
 tgcagatata atatgttaaa caatatcaca ttgttgaaga aaattacact ggaaagcgta 600
 aaatatagct tggatgccac attgagtga c 631

<210> 705
 <211> 414
 <212> DNA
 <213> Homo sapiens

<400> 705
 atttaagagt atgtgcttaa acagttaa atgtgcatgt cgttggaaact tttaaaaata 60
 agtcatatgg atacagggct gctgcttaag gatgtgcagg ttatacagtt gtgcaaggat 120
 gccattgttc tccactgttc tcttttctaa tgtttatatt aatgatttcc ttctgcagaa 180
 acctgaaaat actacaagcc aaccactttc taatcagcga gttgtagagg tggcgatccc 240
 tcatgtaggg aaatttatga ttgaatcaaa ggaggggggg tatgatgacg aggtaccttt 300
 tacagccctc tgcaccattg ctacttaact tttgctattt aatacaataa ctttgggcat 360
 gcctgcaccc tcatacttaa tgtctattgc cacataacat acagctttgc cccc 414

<210> 706
 <211> 852
 <212> DNA
 <213> Homo sapiens

<400> 706
 aaagagctaa gggaatgggg aagtttcaac atcatgggac tattgaactg taattcagaa 60

gacacagtca	aataaaacta	caagtagaag	ctcggagaaa	aagctgctgc	cttctcagct	120
gctacgaggt	gaggagtcag	ggatggggat	tcaatggaca	tgtgaatggc	cgctcgtctct	180
gtcacctggg	tggaagttca	tagcatgtct	ctggttctcc	atgtgggggt	cacgccctcc	240
actttctcaa	gctatgagtc	acaagcaatg	gcccattgctg	tgtagctcca	tttctaaccc	300
ggaagcttct	ggaacggaac	tggtcaccta	ccattttcat	atgatgggat	acattgaaag	360
gttttgcccg	acagaagaat	tagctcaacg	ctgtagtgtg	cataaagagc	tgccctgcac	420
tgtgttcaca	gagaagcact	gctcttgcac	tttctcatg	gtgtttgggg	tttgacatg	480
agacttagct	catgtggcta	agcccatggg	tttccaggcg	aaagaaaagg	cttataacta	540
gcaaggtgtc	cctagggtct	caagtggagg	agacagagca	gaggggactt	ctgaaggcct	600
gaggcaccgc	tgactgctgc	atggtaaaa	ttcttaggtg	aagccaagtt	ttctttctgg	660
acagtgggtc	ctgggggcaa	tgaaaccgga	tcacggggaa	gggatctggg	cttctctctg	720
ggtaaaagcc	tcgtgtagat	gaaattgaaa	ctaccctcct	cttgtgtgtc	gccctttttg	780
tccagctgca	ttttcaagac	tcctgaaaaa	ataaaggcag	ggaaaaaaa	aaaaggcgcc	840
ccttttaaaa	cc					852

<210> 707

<211> 1987

<212> DNA

<213> Homo sapiens

<400> 707

ggaattcaaa	aagtaaaact	aacacttttt	cttattttta	agtgagggat	ctgactcctt	60
aattttctag	tttttctttt	aatcaagggc	tctattactg	tcaccattga	gaaattgtaa	120
taatatcaag	agacatgtag	gtaagtgggc	actttaggta	caaaatattg	attgggttaa	180
gcccagttgc	tggcattggg	tggtgttaga	gagtaacaaa	aaaagaaaga	aggacgtaga	240
tatgactatt	taaaagaggc	tcttaatttt	gtaactcctg	ttatgtgaat	ctaaaggctc	300
gattgttaaa	gcagttgaac	ccaaaagtct	tgttttatgt	ggcttactca	tggtagtttg	360
gcattgctaa	ccactctggg	cttgcaactt	tcttgtaaat	ttttgcaaca	ttattctcgc	420
ttgatttttt	tctttacttc	tctgactggg	ctttcttaaa	cctgtccttg	agtgtatact	480
cttacatttg	atgttcctct	ggattatctc	ttcaccctc	ttctttctca	tgatgctctt	540
gcacattatt	tttaaaaata	ttaccctact	ttgatagtgt	atctgcactg	agacatgtac	600
tggaagctat	atatgttttg	acatctcaat	ctaaaacaac	tcacttttct	tacttatgac	660
tagagttcct	cctcttcatt	tatattcttt	tcttggtgaa	catcagtgtc	taccaatttc	720
taaatgcaaa	ggagaaagat	acaattttta	gcgaaatggg	ggcgatatgc	acaacttgca	780
gaaggttaca	taaaacttgg	gttttcagag	atgatttttt	cttttctttt	taggatattg	840
tcagggaatg	agtgatctac	tttccctctc	tttatatgtg	atggaaaatg	aagtggatgc	900
cttttggtgc	tttgctctct	acatggacca	aatgcatcag	aattttgaag	aacaaatgca	960
aggcatgaag	accagcttaa	ttcagctgag	taccttactt	cgattgttag	acagtggatt	1020
ttgcagttac	ttagaatctc	aggactctgg	atacctttat	ttttgcttca	ggtggctttt	1080
aatcagattc	aaaagggaat	ttagtcttct	agatattctt	cgattatggg	aggtaatgtg	1140
gaccgaacta	ccatgtacaa	atttccatct	tcttctctgt	tgtgctattc	tggaatcaga	1200
aaagcgcaaa	ataatggaaa	agcattatgg	cttcaatgaa	atacttaagc	atatcaatga	1260
attgtccatg	aaaattgatg	tggaagatat	actctgcaag	gcagaagcaa	tttctctaca	1320
gatggtaaaa	tgcaagggaat	tgccacaagc	agtctgtgag	atccttgggc	ttcaaggcag	1380
tgaagtaca	acaccagatt	cagacgttgg	tgaagacgaa	aatgttgtca	tgactccttg	1440
tcctacatct	gcatttcaaa	gtaatgcctt	gcctacactc	tctgccagtg	gagccagaaa	1500
tgacagccca	acacagatac	cagtgtcctc	agatgtctgc	agattaacac	ctgcatgac	1560
actgttcttg	cttttttggg	aagagacact	ttgttgcaac	cctttttcaa	gtacttgaaa	1620
gttgaaaatt	tgaatcttgg	gtattgatca	tgctttaagg	tttatgtaaa	gaaagtgtac	1680
tgatgttctt	acattaaagg	tttacaaga	tttaaaacta	ttatttttgt	agttacttct	1740
accaaatagc	ctttcctttt	cgataacatt	cctcagttat	tttatagcca	agtacatttt	1800
attttcttgc	tgatgaactg	gaattggata	aatattgcaa	gtggatgagt	tggaatttat	1860
gcactttgaa	aaacattcac	tttgtttaag	cttattgggt	ttcagatttg	attaaattaa	1920
atgtggaggc	tttctatagc	attctaagct	gagaagtaga	ttgttaccga	gtaatgaaat	1980
aaaaaat						1987

<210> 708

<211> 400

<212> DNA

<213> Homo sapiens

<400> 708
 atctggcctg gtgcctgggt ccatgggtgc cagcctggca ctggggttca ctgaggtggt 60
 tctagtgtctg gggttcacag taaagttagg ggctcacttg actctccttc ctccacttgg 120
 agggcatcta tctccatact gtgctgcaca ggcttgggaa ggggtgaaac aattaatgtg 180
 caactgtagt tcctatcctc ttcaatgcat catttggtgt atctatgcta caccgggtg 240
 ctacaatcta tcatttgga tcccttagctc ttgtgaaggt attttgtct atgagtgggt 300
 attcgaaatg cttctgtgaa gaaacaaatg ctgaaaacta ctattctgac attttactaa 360
 catcactctt cctatttaac ttttaaatat gatgaagtca 400

<210> 709

<211> 55

<212> PRT

<213> Homo sapiens

<400> 709
 Met Gly Lys Ser Leu Ala Ser Gln Phe Pro Ile Thr Leu Ile Phe Ser
 1 5 10 15
 Ala Phe Ser Ser Thr Phe Cys Leu Leu Asp Gly Leu Phe Ile Ser Cys
 20 25 30
 Pro Cys Thr Ser Thr Glu Leu Pro Lys Val Asn Ser Leu Leu Ser Arg
 35 40 45
 Pro Glu Ser Ala Thr Thr *
 50 54

<210> 710

<211> 55

<212> PRT

<213> Homo sapiens

<400> 710
 Met Leu Ala Leu Ser Ser Ser Phe Leu Val Leu Ser Tyr Leu Leu Thr
 1 5 10 15
 Arg Trp Cys Gly Ser Val Gly Phe Ile Leu Ala Asn Cys Phe Asn Met
 20 25 30
 Gly Ile Arg Ile Thr Gln Ser Leu Cys Phe Ile His Arg Tyr Tyr Arg
 35 40 45
 Arg Ser Pro His Arg Pro Leu
 50 55

<210> 711

<211> 172

<212> PRT

<213> Homo sapiens

<400> 711
 Met Lys Val Leu Trp Ala Ala Leu Leu Val Thr Phe Leu Ala Gly Cys
 1 5 10 15
 Gln Ala Lys Val Glu Gln Ala Val Glu Thr Glu Pro Glu Pro Glu Leu
 20 25 30
 Arg Gln Gln Thr Glu Trp Gln Ser Gly Gln Arg Trp Glu Leu Ala Leu
 35 40 45
 Gly Arg Phe Trp Asp Tyr Leu Arg Trp Val Gln Thr Leu Ser Glu Gln

```

      50              55              60
Val Gln Glu Glu Leu Leu Ser Ser Gln Val Thr Gln Glu Leu Arg Ala
 65              70              75              80
Leu Met Asp Glu Thr Met Lys Glu Leu Lys Ala Tyr Lys Ser Glu Leu
      85              90              95
Glu Glu Gln Leu Thr Pro Val Ala Glu Glu Thr Arg Ala Arg Leu Ser
      100              105              110
Lys Glu Leu Gln Ala Ala Gln Ala Arg Leu Gly Ala Asp Met Glu Asp
      115              120              125
Val Cys Gly Arg Leu Gly Ala Val Thr Ala Val Met Val Gln Gly His
      130              135              140
Ala Arg Pro Glu Gln Pro Arg Ser Cys Gly Trp Arg Val Arg Leu Pro
      145              150              155              160
Pro Ala Gln Ala Gly Val Ser Gly Ser Leu Arg *
      165              170 171

```

<210> 712
 <211> 55
 <212> PRT
 <213> Homo sapiens

```

      <400> 712
Met Phe Arg Arg Leu Thr Phe Ala Gln Leu Leu Phe Ala Thr Val Leu
 1              5              10              15
Gly Ile Ala Gly Gly Val Tyr Ile Phe Gln Pro Val Phe Glu Gln Tyr
      20              25              30
Ala Lys Asp Gln Lys Glu Leu Lys Glu Lys Met Gln Leu Val Gln Glu
      35              40              45
Ser Glu Glu Lys Lys Ser *
      50              54

```

<210> 713
 <211> 366
 <212> PRT
 <213> Homo sapiens

```

      <400> 713
Met Ser Leu Leu Gly Phe Leu Leu Ser Arg Leu Gly Leu Leu Lys
 1              5              10              15
Val Leu Leu Asp Trp Pro Val Glu Val Leu Tyr Gly Ala Ala Ala Leu
      20              25              30
Asn Gly Leu Phe Gly Gly Phe Ser Ala Phe Trp Ser Gly Val Met Ala
      35              40              45
Leu Gly Ser Leu Gly Ser Ser Glu Gly Arg Arg Ser Val Arg Leu Ile
      50              55              60
Leu Ile Asp Leu Met Leu Gly Leu Ala Gly Phe Cys Gly Ser Met Ala
      65              70              75              80
Ser Gly His Leu Phe Lys Gln Met Ala Gly His Ser Gly Gln Gly Leu
      85              90              95
Ile Leu Thr Ala Cys Ser Val Ser Cys Ala Ser Phe Ala Leu Leu Tyr
      100              105              110
Ser Leu Leu Val Leu Lys Val Pro Glu Ser Val Ala Lys Pro Ser Gln
      115              120              125
Glu Leu Pro Ala Val Asp Thr Val Ser Gly Thr Val Gly Thr Tyr Arg
      130              135              140
Thr Leu Asp Pro Asp Gln Leu Asp Gln Gln Tyr Ala Val Gly His Pro
      145              150              155              160
Pro Ser Pro Gly Lys Ala Lys Pro His Lys Thr Thr Ile Ala Leu Leu

```

WO 01/55437

PCT/US01/02623

```

      165      170      175
Phe Val Gly Ala Ile Ile Tyr Asp Leu Ala Val Val Gly Thr Val Asp
      180      185      190
Val Ile Pro Leu Phe Val Leu Arg Glu Pro Leu Gly Trp Asn Gln Val
      195      200      205
Gln Val Gly Tyr Gly Met Ala Ala Gly Tyr Thr Ile Phe Ile Thr Ser
      210      215      220
Phe Leu Gly Val Leu Val Phe Ser Arg Cys Phe Arg Asp Thr Thr Met
      225      230      235      240
Ile Met Ile Gly Met Val Ser Phe Gly Ser Gly Ala Leu Leu Leu Ala
      245      250      255
Phe Val Lys Glu Thr Tyr Met Phe Tyr Ile Ala Arg Ala Val Met Leu
      260      265      270
Phe Ala Leu Ile Pro Val Thr Thr Ile Arg Ser Ala Met Ser Lys Leu
      275      280      285
Ile Lys Gly Ser Ser Tyr Gly Lys Val Phe Val Ile Leu Gln Leu Ser
      290      295      300
Leu Ala Leu Thr Gly Val Val Thr Ser Thr Leu Tyr Asn Lys Ile Tyr
      305      310      315      320
Gln Leu Thr Met Asp Met Phe Gly Gly Ser Cys Phe Ala Leu Ser Ser
      325      330      335
Phe Leu Ser Phe Leu Ala Ile Ile Pro Ile Ser Ile Val Ala Tyr Lys
      340      345      350
Gln Val Pro Leu Ser Pro Tyr Gly Asp Ile Ile Glu Lys *
      355      360      365

```

<210> 714
 <211> 131
 <212> PRT
 <213> Homo sapiens

```

      <400> 714
Met Phe Leu Phe Leu Phe Phe Leu Val Ala Ile Leu Pro Val Asn Thr
      1      5      10      15
Glu Gly Gly Glu Ile Ile Trp Gly Thr Glu Ser Lys Pro His Ser Arg
      20      25      30
Pro Tyr Met Ala Phe Ile Lys Phe Tyr Asp Ser Asn Ser Glu Pro His
      35      40      45
His Cys Gly Gly Phe Leu Val Ala Lys Asp Ile Val Met Thr Ala Ala
      50      55      60
His Cys Asn Gly Arg Asn Ile Lys Val Thr Leu Gly Ala His Asn Ile
      65      70      75      80
Lys Lys Gln Glu Asn Thr Gln Val Ile Ser Val Val Lys Ala Lys Pro
      85      90      95
His Glu Asn Tyr Asp Arg Asp Ser His Phe Asn Asp Ile Met Leu Leu
      100      105      110
Lys Leu Glu Arg Lys Ala Gln Leu Asn Gly Cys Cys Glu Asp Tyr Cys
      115      120      125
Pro Ser *
      130

```

<210> 715
 <211> 262
 <212> PRT
 <213> Homo sapiens

```

      <400> 715
Met Leu Val Leu Leu Val Leu Arg Val Ser Leu Ala Ala Leu Val Lys

```

WO 01/55437

PCT/US01/02623

```

1           5           10           15
Met Glu Leu Leu Val Arg Trp Ala Pro Val Ala Cys Leu Val Arg Glu
20           25           30
Val Ala Leu Glu Pro Leu Ala Leu Leu Val Leu Val Glu Met Met Val
35           40           45
Leu Leu Val Leu Pro Gly Pro Leu Val Pro Pro Ala Pro Leu Val Leu
50           55           60
Leu Ala Ser Leu Val Leu Leu Val Leu Arg Val Lys Leu Val Pro Lys
65           70           75           80
Gly Pro Glu Ala Leu Lys Val Pro Arg Val Cys Val Val Ser Leu Ala
85           90           95
Pro Leu Ala Leu Val Leu Leu Ala Leu Leu Glu Thr Leu Val Leu
100          105          110
Arg Glu Ser Leu Val Leu Lys Val Pro Met Val Leu Leu Val Leu Leu
115          120          125
Val Leu Leu Ala Ser Leu Val Pro Glu Ala Pro Leu Asp Pro Arg Ala
130          135          140
Pro Ala Ala Leu Leu Val Pro Arg Val Thr Ala Val Asn Leu Val Leu
145          150          155          160
Leu Ala Ala Lys Glu Thr Leu Val Leu Arg Glu Ser Leu Ala Leu Leu
165          170          175
Val Phe Lys Asp Pro Leu Ala Leu Leu Glu Arg Lys Glu Ser Glu Glu
180          185          190
Leu Glu Val Asn Pro Asp Pro Leu Ala Cys Pro Asp Pro Leu Ala Ser
195          200          205
Val Val Asp Leu Val Ala Val Val Ser Leu Ala Gln Met Val Leu Leu
210          215          220
Val Pro Arg Val Pro Leu Val Asn Val Val Leu Leu Ala Leu Leu Ala
225          230          235          240
Pro Lys Asp Leu Leu Val Lys Leu Val Val Pro Val Lys Leu Val Cys
245          250          255
Leu Val Pro Arg Val *
260 261

```

<210> 716

<211> 54

<212> PRT

<213> Homo sapiens

<400> 716

```

Met Met Leu Leu Val Ser Leu His Ile Leu Phe Pro Phe Met Pro Phe
1           5           10           15
Ser Tyr Gly Leu Glu Ser Asn Asn Ser Lys Pro Gln Cys Leu Met Lys
20           25           30
Leu Thr Leu Gln Asn Leu Gln Lys Gln Val Ala Phe Glu Val Phe Ser
35           40           45
His Thr Lys Tyr Asn *
50           53

```

<210> 717

<211> 183

<212> PRT

<213> Homo sapiens

<400> 717

```

Met Gly Trp Thr Met Arg Leu Val Thr Ala Ala Leu Leu Leu Gly Leu
1           5           10           15
Met Met Val Val Thr Gly Asp Glu Asp Glu Asn Ser Pro Cys Ala His

```

```

      20      25      30
Glu Ala Leu Leu Asp Glu Asp Thr Leu Phe Cys Gln Gly Leu Glu Val
      35      40      45
Phe Tyr Pro Glu Leu Gly Asn Ile Gly Cys Lys Val Val Pro Asp Cys
      50      55      60
Asn Asn Tyr Arg Gln Lys Ile Thr Ser Trp Met Glu Pro Ile Val Lys
      65      70      75      80
Phe Pro Gly Ala Val Asp Gly Ala Thr Tyr Ile Leu Val Met Val Asp
      85      90      95
Pro Asp Ala Pro Ser Arg Ala Glu Pro Arg Gln Arg Phe Trp Arg His
      100      105      110
Trp Leu Val Thr Asp Ile Lys Gly Ala Asp Leu Lys Glu Gly Lys Ile
      115      120      125
Gln Gly Gln Glu Leu Ser Ala Leu Pro Gly Ser Leu Pro His Arg His
      130      135      140
Thr Val Ala Phe His Arg Tyr Gln Val Leu Cys Leu Ser Ser Gly Arg
      145      150      155      160
Glu Lys Ser Ser Leu Ser Phe Pro Arg Lys Thr Lys Leu Glu Ala Leu
      165      170      175
Gly Lys Trp Thr Asp Phe *
      180      182

```

<210> 718

<211> 88

<212> PRT

<213> Homo sapiens

<400> 718

```

Met Arg Arg Ser Phe Trp Thr Val Met Arg Thr Ala Trp Arg Cys Ser
1      5      10      15
Cys Ser Ser Val Asp Arg Ala Leu Ser His Gln Ala Gly Leu Gln Gly
      20      25      30
Gln Cys Leu Ser Ala Cys Leu Leu Gly Asn Leu Gly Tyr Pro Pro Phe
      35      40      45
Ile Ser Pro Pro Ala Gln Val Leu Cys Ala Ala Arg Ala Ser Cys His
      50      55      60
Leu Gly Ser Leu Met Ala His Phe Glu Thr Leu Val His Ser Lys Asp
      65      70      75      80
Trp Ser Cys Val Ile Leu Lys *
      85      87

```

<210> 719

<211> 315

<212> PRT

<213> Homo sapiens

<400> 719

```

Met Leu Phe Trp Val Leu Gly Leu Leu Ile Leu Cys Gly Phe Leu Trp
1      5      10      15
Thr Arg Lys Gly Lys Leu Lys Ile Glu Asp Ile Thr Asp Lys Tyr Ile
      20      25      30
Phe Ile Thr Gly Cys Asp Ser Gly Phe Gly Asn Leu Ala Ala Arg Thr
      35      40      45
Phe Asp Lys Lys Gly Phe His Val Ile Ala Ala Cys Leu Thr Glu Ser
      50      55      60
Gly Ser Thr Ala Leu Lys Ala Glu Thr Ser Glu Arg Leu Arg Thr Val
      65      70      75      80
Leu Leu Asp Val Thr Asp Pro Glu Asn Val Lys Arg Thr Ala Gln Trp

```


WO 01/55437

PCT/US01/02623

```

      85      90      95
Val Lys Asn Gln Val Gly Glu Lys Gly Leu Trp Gly Leu Ile Asn Asn
      100      105      110
Ala Gly Val Pro Gly Val Leu Ala Pro Thr Asp Trp Leu Thr Leu Glu
      115      120      125
Asp Tyr Arg Glu Pro Ile Glu Val Asn Leu Phe Gly Leu Ile Ser Val
      130      135      140
Thr Leu Asn Met Leu Pro Leu Val Lys Lys Ala Gln Gly Arg Val Ile
      145      150      155      160
Asn Val Ser Ser Val Gly Gly Arg Leu Ala Ile Val Gly Gly Gly Tyr
      165      170      175
Thr Pro Ser Lys Tyr Ala Val Glu Gly Phe Asn Asp Ser Leu Arg Arg
      180      185      190
Asp Met Lys Ala Phe Gly Val His Val Ser Cys Ile Glu Pro Gly Leu
      195      200      205
Phe Lys Thr Asn Leu Ala Asp Pro Val Lys Val Ile Glu Lys Lys Leu
      210      215      220
Ala Ile Trp Glu Gln Leu Ser Pro Asp Ile Lys Gln Gln Tyr Gly Glu
      225      230      235      240
Gly Tyr Ile Glu Lys Ser Leu Asp Lys Leu Lys Gly Asn Lys Ser Tyr
      245      250      255
Val Asn Met Asp Leu Ser Pro Val Val Glu Cys Met Asp His Ala Leu
      260      265      270
Thr Ser Leu Phe Pro Lys Thr His Tyr Ala Ala Gly Lys Asp Ala Lys
      275      280      285
Ile Phe Trp Ile Pro Leu Ser His Met Pro Ala Ala Leu Gln Asp Phe
      290      295      300
Leu Leu Leu Lys Gln Lys Ala Arg Ala Gly *
      305      310      314

```

<210> 720

<211> 120

<212> PRT

<213> Homo sapiens

<400> 720

```

Met Ser Val Pro Thr Met Ala Trp Met Met Leu Leu Leu Gly Leu Leu
  1      5      10      15
Ala Tyr Gly Ser Gly Val Glu Ser Gln Thr Val Val Thr Gln Glu Pro
      20      25      30
Ser Leu Ser Val Ser Pro Gly Gly Thr Val Thr Leu Thr Cys Gly Leu
      35      40      45
Thr Ser Gly Ser Val Ser Thr Ser Phe Tyr Pro Ser Trp Tyr Gln Gln
      50      55      60
Thr Pro Gly Gln Ala Pro Arg Thr Leu Ile Tyr Ser Thr Asn Thr Arg
      65      70      75      80
Ser Ser Gly Val Pro Gly Arg Phe Ser Gly Ser Ile Leu Gly Ser Lys
      85      90      95
Ala Ala Leu Thr Ile Thr Gly Ala Gln Ala Asp Asp Glu Ser Asp Tyr
      100      105      110
Tyr Cys Val Leu Ile Cys Arg *
      115      119

```

<210> 721

<211> 1071

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(1071)

<223> Xaa = any amino acid or nothing

<400> 721

```

Met Asn Cys Asp Val Leu Trp Cys Val Leu Leu Leu Val Cys Met Ser
 1           5           10           15
Leu Phe Ser Ala Val Gly His Gly Leu Trp Ile Trp Arg Tyr Gln Glu
 20           25           30
Lys Lys Ser Leu Phe Tyr Val Pro Lys Ser Asp Gly Ser Ser Leu Ser
 35           40           45
Pro Val Thr Ala Ala Val Tyr Ser Phe Leu Thr Met Ile Ile Val Leu
 50           55           60
Gln Val Leu Ile Pro Ile Ser Leu Tyr Val Ser Ile Glu Ile Val Lys
 65           70           75           80
Ala Cys Gln Val Tyr Phe Ile Asn Gln Asp Met Gln Leu Tyr Asp Glu
 85           90           95
Glu Thr Asp Ser Gln Leu Gln Cys Arg Ala Leu Asn Ile Thr Glu Asp
100           105           110
Leu Gly Gln Ile Gln Tyr Ile Phe Ser Asp Lys Thr Gly Thr Leu Thr
115           120           125
Glu Asn Lys Met Val Phe Arg Arg Cys Thr Val Ser Gly Val Glu Tyr
130           135           140
Ser His Asp Ala Asn Ala Gln Arg Leu Ala Arg Tyr Gln Glu Ala Asp
145           150           155           160
Ser Glu Glu Glu Glu Val Val Pro Arg Gly Gly Ser Val Ser Gln Arg
165           170           175
Gly Ser Ile Gly Ser His Gln Ser Val Arg Val Val His Arg Thr Gln
180           185           190
Ser Thr Lys Ser His Arg Arg Thr Gly Ser Arg Ala Glu Ala Lys Arg
195           200           205
Ala Ser Met Leu Ser Lys His Thr Ala Phe Ser Ser Pro Met Glu Lys
210           215           220
Asp Ile Thr Pro Asp Pro Lys Leu Leu Glu Lys Val Ser Glu Cys Asp
225           230           235           240
Lys Ser Leu Ala Val Ala Arg His Gln Glu His Leu Leu Ala His Leu
245           250           255
Ser Pro Glu Leu Ser Asp Val Phe Asp Phe Leu Ile Ala Leu Thr Ile
260           265           270
Cys Asn Thr Val Val Val Thr Ser Pro Asp Gln Pro Arg Thr Lys Val
275           280           285
Arg Val Arg Phe Glu Leu Lys Ser Pro Val Lys Thr Ile Glu Asp Phe
290           295           300
Leu Arg Arg Phe Thr Pro Ser Cys Leu Thr Ser Gly Cys Ser Ser Ile
305           310           315           320
Gly Ser Leu Ala Ala Asn Lys Ser Ser His Lys Leu Gly Ser Ser Phe
325           330           335
Pro Ser Thr Pro Ser Ser Asp Gly Met Leu Leu Arg Leu Glu Glu Arg
340           345           350
Leu Gly Gln Pro Thr Ser Ala Ile Ala Ser Asn Gly Tyr Ser Ser Gln
355           360           365
Ala Asp Asn Trp Ala Ser Glu Leu Ala Gln Glu Glu Ser Glu Arg
370           375           380
Glu Leu Arg Tyr Glu Ala Glu Ser Pro Asp Glu Ala Ala Leu Val Tyr
385           390           395           400
Ala Ala Arg Ala Tyr Asn Cys Val Leu Val Glu Arg Leu His Asp Gln
405           410           415
Val Ser Val Glu Leu Pro His Leu Gly Arg Leu Thr Phe Glu Leu Leu
420           425           430
His Thr Leu Gly Phe Asp Ser Val Arg Lys Arg Met Ser Val Val Ile
435           440           445
Arg His Pro Leu Thr Asp Glu Ile Asn Val Tyr Thr Lys Gly Ala Asp
450           455           460
Ser Val Val Met Asp Leu Leu Gln Pro Cys Ser Ser Val Asp Ala Arg

```

465					470					475				480
Gly	Arg	His	Gln	Lys	Lys	Ile	Arg	Ser	Lys	Thr	Gln	Asn	Tyr	Leu Asn
				485					490					495
Val	Tyr	Ala	Ala	Glu	Gly	Leu	Arg	Thr	Leu	Cys	Ile	Ala	Lys	Arg Val
			500					505					510	
Leu	Ser	Lys	Glu	Glu	Tyr	Ala	Cys	Trp	Leu	Gln	Ser	His	Leu	Glu Ala
		515					520					525		
Glu	Ser	Ser	Leu	Glu	Asn	Ser	Glu	Glu	Leu	Leu	Phe	Gln	Ser	Ala Ile
	530					535					540			
Arg	Leu	Glu	Thr	Asn	Leu	His	Leu	Leu	Gly	Ala	Thr	Gly	Ile	Glu Asp
545				550					555					560
Arg	Leu	Gln	Asp	Gly	Val	Pro	Glu	Thr	Ile	Ser	Lys	Leu	Arg	Gln Ala
			565					570						575
Gly	Leu	Gln	Ile	Trp	Val	Leu	Thr	Gly	Asp	Lys	Gln	Glu	Thr	Ala Val
		580						585					590	
Asn	Ile	Ala	Tyr	Ala	Cys	Lys	Leu	Leu	Asp	His	Asp	Glu	Glu	Val Ile
	595						600					605		
Thr	Leu	Asn	Ala	Thr	Ser	Gln	Glu	Ala	Cys	Ala	Ala	Leu	Leu	Asp Gln
	610					615					620			
Cys	Leu	Cys	Tyr	Val	Gln	Ser	Arg	Gly	Pro	Gln	Arg	Ala	Pro	Glu Lys
625				630						635				640
Thr	Lys	Gly	Lys	Val	Ser	Met	Arg	Phe	Ser	Ser	Leu	Cys	Pro	Pro Ser
			645					650						655
Thr	Ser	Thr	Ala	Ser	Gly	Arg	Arg	Pro	Ser	Leu	Val	Ile	Asp	Gly Arg
		660						665					670	
Ser	Met	Ala	Tyr	Ala	Leu	Glu	Lys	Asn	Leu	Glu	Asp	Lys	Phe	Leu Phe
	675						680				685			
Leu	Ala	Lys	Gln	Cys	Arg	Ser	Val	Leu	Cys	Cys	Arg	Ser	Thr	Pro Leu
	690					695					700			
Gln	Lys	Ser	Met	Val	Val	Lys	Leu	Val	Arg	Ser	Lys	Leu	Lys	Ala Met
705				710						715				720
Thr	Leu	Ala	Ile	Gly	Asp	Gly	Ala	Asn	Asp	Val	Ser	Met	Ile	Gln Val
			725						730					735
Ala	Asp	Val	Gly	Val	Gly	Ile	Ser	Gly	Gln	Glu	Gly	Met	Gln	Ala Val
		740						745					750	
Met	Ala	Ser	Asp	Phe	Ala	Val	Pro	Lys	Phe	Arg	Tyr	Leu	Glu	Arg Leu
	755						760					765		
Leu	Ile	Leu	His	Gly	His	Trp	Cys	Tyr	Ser	Arg	Leu	Ala	Asn	Met Val
	770					775					780			
Leu	Tyr	Phe	Phe	Tyr	Lys	Asn	Thr	Met	Phe	Val	Gly	Leu	Leu	Phe Trp
785				790					795					800
Phe	Gln	Phe	Phe	Cys	Gly	Phe	Ser	Ala	Ser	Thr	Met	Ile	Asp	Gln Trp
			805						810					815
Tyr	Leu	Ile	Phe	Phe	Asn	Leu	Leu	Phe	Ser	Ser	Leu	Pro	Pro	Leu Val
		820						825					830	
Thr	Gly	Val	Leu	Asp	Arg	Asp	Val	Pro	Ala	Asn	Val	Leu	Leu	Thr Asn
	835						840					845		
Pro	Gln	Leu	Tyr	Lys	Ser	Gly	Gln	Asn	Met	Glu	Glu	Tyr	Arg	Pro Arg
	850					855				860				
Thr	Phe	Trp	Phe	Asn	Met	Ala	Asp	Ala	Ala	Phe	Gln	Ser	Leu	Val Cys
865				870					875					880
Phe	Ser	Ile	Pro	Tyr	Leu	Ala	Tyr	Tyr	Asp	Ser	Asn	Val	Asp	Leu Phe
			885						890					895
Thr	Trp	Gly	Thr	Pro	Ile	Val	Thr	Ile	Ala	Leu	Leu	Thr	Phe	Leu Leu
		900						905					910	
His	Leu	Gly	Ile	Glu	Thr	Lys	Thr	Trp	Thr	Trp	Leu	Asn	Trp	Ile Thr
		915					920					925		
Cys	Gly	Phe	Ser	Val	Leu	Leu	Phe	Phe	Thr	Val	Ala	Leu	Ile	Tyr Asn
	930						935				940			
Ala	Ser	Cys	Ala	Thr	Cys	Tyr	Pro	Pro	Ser	Asn	Pro	Tyr	Trp	Thr Met
945				950						955				960
Gln	Ala	Leu	Leu	Gly	Asp	Pro	Val	Phe	Tyr	Leu	Thr	Cys	Leu	Met Thr
			965						970					975
Pro	Val	Ala	Ala	Leu	Leu	Pro	Arg	Leu	Phe	Phe	Arg	Ser	Leu	Gln Gly

WO 01/55437

PCT/US01/02623

980 985 990
 Arg Val Phe Pro Thr Gln Leu Gln Leu Ala Arg Gln Leu Thr Arg Lys
 995 1000 1005
 Ser Pro Arg Arg Cys Ser Ala Pro Lys Glu Thr Phe Ala Gln Gly Arg
 1010 1015 1020
 Pro Xaa Glu Gly Leu Gly Asn Arg Gly Thr His Gln Gly Gly Gln Ser
 1025 1030 1035 1040
 Arg Pro Leu Cys Pro Cys Pro Ser Leu Leu Gly Thr His Ser Ser Arg
 1045 1050 1055
 Ser Ala Pro Trp Arg Pro Ala Gly Ser Pro Ala Gln Trp Thr *
 1060 1065 1070

<210> 722
 <211> 648
 <212> PRT
 <213> Homo sapiens

<400> 722
 Met Leu Trp Val Thr Gly Pro Val Leu Ala Val Ile Leu Ile Ile Leu
 1 5 10 15
 Ile Val Ile Ala Ile Leu Leu Phe Lys Arg Lys Arg Thr His Ser Pro
 20 25 30
 Ser Ser Lys Asp Glu Gln Ser Ile Gly Leu Lys Asp Ser Leu Leu Ala
 35 40 45
 His Ser Ser Asp Pro Val Glu Met Arg Arg Leu Asn Tyr Gln Thr Pro
 50 55 60
 Gly Met Arg Asp His Pro Ile Pro Ile Thr Asp Leu Ala Asp Asn
 65 70 75 80
 Ile Glu Arg Leu Lys Ala Asn Asp Gly Leu Lys Phe Ser Gln Glu Tyr
 85 90 95
 Glu Ser Ile Asp Pro Gly Gln Gln Phe Thr Trp Glu Asn Ser Asn Leu
 100 105 110
 Glu Val Asn Lys Pro Lys Asn Arg Tyr Ala Asn Val Ile Ala Tyr Asp
 115 120 125
 His Ser Arg Val Ile Leu Thr Ser Ile Asp Gly Val Pro Gly Ser Asp
 130 135 140
 Tyr Ile Asn Ala Asn Tyr Ile Asp Gly Tyr Arg Lys Gln Asn Ala Tyr
 145 150 155 160
 Ile Ala Thr Gln Gly Pro Leu Pro Glu Thr Met Gly Asp Phe Trp Arg
 165 170 175
 Met Val Trp Glu Gln Arg Thr Ala Thr Val Val Met Met Thr Arg Leu
 180 185 190
 Glu Glu Lys Ser Arg Val Lys Cys Asp Gln Tyr Trp Pro Ala Arg Gly
 195 200 205
 Thr Glu Thr Cys Gly Leu Ile Gln Val Thr Leu Leu Asp Thr Val Glu
 210 215 220
 Leu Ala Thr Tyr Thr Val Arg Thr Phe Ala Leu His Lys Ser Gly Ser
 225 230 235 240
 Ser Glu Lys Arg Glu Leu Arg Gln Phe Gln Phe Met Ala Trp Pro Asp
 245 250 255
 His Gly Val Pro Glu Tyr Pro Thr Pro Ile Leu Ala Phe Leu Arg Arg
 260 265 270
 Val Lys Ala Cys Asn Pro Leu Asp Ala Gly Pro Met Val Val His Cys
 275 280 285
 Ser Ala Gly Val Gly Arg Thr Gly Cys Phe Ile Val Ile Asp Ala Met
 290 295 300
 Leu Glu Arg Met Lys His Glu Lys Thr Val Asp Ile Tyr Gly His Val
 305 310 315 320
 Thr Cys Met Arg Ser Gln Arg Asn Tyr Met Val Gln Thr Glu Asp Gln
 325 330 335
 Tyr Val Phe Ile His Glu Ala Leu Leu Glu Ala Ala Thr Cys Gly His

```

      340      345      350
Thr Glu Val Pro Ala Arg Asn Leu Tyr Ala His Ile Gln Lys Leu Gly
      355      360      365
Gln Val Pro Pro Gly Glu Ser Val Thr Ala Met Glu Leu Glu Phe Lys
      370      375      380
Leu Leu Ala Ser Ser Lys Ala His Thr Ser Arg Phe Ile Ser Ala Asn
385      390      395      400
Leu Pro Cys Asn Lys Phe Lys Asn Arg Leu Val Asn Ile Met Pro Tyr
      405      410      415
Glu Leu Thr Arg Val Cys Leu Gln Pro Ile Arg Gly Val Glu Gly Ser
      420      425      430
Asp Tyr Ile Asn Ala Ser Phe Leu Asp Gly Tyr Arg Gln Gln Lys Ala
      435      440      445
Tyr Ile Ala Thr Gln Gly Pro Leu Ala Glu Ser Thr Glu Asp Phe Trp
      450      455      460
Arg Met Leu Trp Glu His Asn Ser Thr Ile Ile Val Met Leu Thr Lys
465      470      475      480
Leu Arg Glu Met Gly Arg Glu Lys Cys His Gln Tyr Trp Pro Ala Glu
      485      490      495
Arg Ser Ala Arg Tyr Gln Tyr Phe Val Val Asp Pro Met Ala Glu Tyr
      500      505      510
Asn Met Pro Gln Tyr Ile Leu Arg Glu Phe Lys Val Thr Asp Ala Arg
      515      520      525
Asp Gly Gln Ser Arg Thr Ile Arg Gln Phe Gln Phe Thr Asp Trp Pro
      530      535      540
Glu Gln Gly Val Pro Lys Thr Gly Glu Gly Phe Ile Asp Phe Ile Gly
545      550      555      560
Gln Val His Lys Thr Lys Glu Gln Phe Gly Gln Asp Gly Pro Ile Thr
      565      570      575
Val His Cys Ser Ala Gly Val Gly Arg Thr Gly Val Phe Ile Thr Leu
      580      585      590
Ser Ile Val Leu Glu Arg Met Arg Tyr Glu Gly Val Val Asp Met Phe
      595      600      605
Gln Thr Val Lys Thr Leu Arg Thr Gln Arg Pro Ala Met Val Gln Thr
      610      615      620
Glu Asp Gln Tyr Gln Leu Cys Tyr Arg Ala Ala Leu Glu Tyr Leu Gly
625      630      635      640
Ser Phe Asp His Tyr Ala Thr *
      645      647

```

<210> 723

<211> 94

<212> PRT

<213> Homo sapiens

<400> 723

```

Met Ile Trp Ile Tyr Phe Ala Phe Ile Phe Gln Arg Leu His Leu Ile
 1      5      10      15
Pro Gly Lys Ser Ser Ala Arg Gln Val Ser Gly Phe Ser Leu Leu Ser
      20      25      30
Phe Asn Pro Ser Asn Thr Ile Phe Val Lys Leu Asp Trp Trp Cys Phe
      35      40      45
Ile Gln Leu Ile Tyr Ser Ala Tyr Leu Phe Glu Lys Arg Leu Leu Glu
      50      55      60
Ile Asp Asp Val Phe Val Pro Val Ile Leu Lys Val Val Gly Ala Arg
      65      70      75      80
Ile Glu Phe His Ser Gly Ile Gly Phe Gly Ser Gly Leu *
      85      90      93

```

WO 01/55437

PCT/US01/02623

<210> 724

<211> 46

<212> PRT

<213> Homo sapiens

<400> 724

```
Met Leu Ile Ala Val Ile Ala Cys Ile Cys Tyr Leu Ser Leu Leu His
 1           5           10           15
Ser Tyr Asp Ile Leu Phe Gly His Phe Ser Val Leu Ser Gln Gly Leu
          20           25           30
Asp Lys His Cys Leu Thr Leu Phe Leu Ser Leu Gly Gly *
```

<210> 725

<211> 120

<212> PRT

<213> Homo sapiens

<400> 725

```
Met Val Ile Ile Asn Cys Ser Pro Arg Phe Trp Phe Leu Phe Pro Phe
 1           5           10           15
Thr Ile Gln His Thr Cys Lys Cys Pro Leu Gly Val Arg Tyr His Thr
          20           25           30
Arg His Leu Glu Gln Ile Ala Ala Asn Lys Lys His Cys Pro Tyr Pro
          35           40           45
Tyr Glu Val His Tyr Asn Ser Ser Tyr Trp Arg Ala Gly Ile Ile Leu
          50           55           60
His Thr Leu His Ala Tyr Leu Thr Ser Tyr Pro His Tyr Tyr Ser Phe
          65           70           75           80
Phe Phe Phe Phe Phe Gly Lys Gly Val Pro Phe Cys Pro Gln Gly Gly
          85           90           95
Gly Ala Gly Lys Gly Ser Gly Leu Met Gly Ser His Arg Gly Thr Lys
          100          105          110
Pro Lys Ser Phe Leu Lys Lys Lys
          115          120
```

<210> 726

<211> 48

<212> PRT

<213> Homo sapiens

<400> 726

```
Met Glu Arg His Gly Phe Phe Leu Asp Val Cys Leu Ile Leu Gly Leu
 1           5           10           15
Ile Pro Leu Ser Ile Lys Tyr Ser Leu Gln Lys Arg Gly Lys Asn Ser
          20           25           30
Ala Ala Asp Asn Ala Gly Trp Ser Asp Leu Ser Leu Gly Gln Asn *
```

<210> 727

<211> 56

<212> PRT

<213> Homo sapiens

WO 01/55437

PCT/US01/02623

<400> 727
 Met Tyr Met Asn Thr Cys Leu Tyr Leu His Val Tyr Val Leu Thr Cys
 1 5 10 15
 Ser Gly Cys Asn Val Asp Met Cys Ser Arg Leu Phe Leu Ser Thr Lys
 20 25 30
 Leu Lys Ala His Val Gln Ile Val Leu Tyr Trp Val Phe Leu Trp Ser
 35 40 45
 Arg Gly Asn Asn Phe Leu Thr *
 50 55

<210> 728
 <211> 52
 <212> PRT
 <213> Homo sapiens

<400> 728
 Met Val Ile Leu Asp Val Leu Glu Leu Tyr His Met Trp Phe Leu Gly
 1 5 10 15
 Ile Leu Tyr Asp Ala Ile Phe Tyr Cys Phe Val His Ala Ile Asn Ala
 20 25 30
 Asp Lys Phe Phe Gly Leu Lys Leu Thr Lys Ser Ala Thr Val Ser Gln
 35 40 45
 Asn Ser Gln *
 50 51

<210> 729
 <211> 55
 <212> PRT
 <213> Homo sapiens

<400> 729
 Met Tyr Asp Phe Leu Leu Leu Ser Phe Ile Phe Ile Val Ala Ser
 1 5 10 15
 Tyr Trp Ser Phe Leu Ser Thr Ile Phe Leu Asp Val Val Cys Ser Ile
 20 25 30
 Leu His Cys Pro Val Lys Pro Gln Thr Leu Leu Lys Ser Cys Leu His
 35 40 45
 Val Asp Cys Lys Ser Thr *
 50 54

<210> 730
 <211> 167
 <212> PRT
 <213> Homo sapiens

<400> 730
 Met Val Gly Leu Gly Gly Met Ser Gln Leu Leu Leu Ala Ser Leu Leu
 1 5 10 15
 Pro Pro Val Pro Gln Gly Ser Pro Thr Arg Arg Lys Leu Pro Ala Ser
 20 25 30
 Leu Leu Val Ser Thr Ala Leu Ile Ser Pro Val Cys Val Arg Gly Trp
 35 40 45
 Met Trp Gln Asn Leu Gln Asn Arg Ile His Gly Ser His Thr Ser Ala
 50 55 60
 Arg Arg Val Pro Ser Leu Pro Gly Ala Gly Gln Val Gly Val Arg Trp

WO 01/55437

PCT/US01/02623

65					70					75				80
Glu	Ala	Gly	Pro	Ala	Cys	Arg	Thr	Gln	Pro	Ser	Pro	Gln	Asn	Leu
				85					90					95
Pro	Arg	Pro	His	Pro	Ser	Ala	Ala	Gln	Leu	Ile	Glu	Asn	Ala	Ala
			100					105					110	
Arg	Ser	Ala	Met	Ser	Gly	Glu	Arg	Leu	Phe	Pro	Glu	Gly	Gln	Glu
		115					120					125		
Leu	Gly	Pro	Leu	Val	Ala	Pro	Arg	Val	Pro	Met	Gly	Gly	Ala	Leu
	130					135					140			
Pro	Pro	Leu	Pro	Ser	Leu	Ser	Cys	Ala	Ile	Cys	Lys	Val	Gly	Ala
145				150						155				160
Arg	Glu	Ala	Gly	Gly	Arg	*								
				165	166									

<210> 731
 <211> 65
 <212> PRT
 <213> Homo sapiens

<400> 731														
Met	Lys	Pro	Tyr	Cys	Met	Tyr	Pro	Phe	Leu	Ser	Gly	Leu	Leu	Ser
1				5					10					15
Leu	Leu	Phe	Trp	Val	Glu	Ser	Leu	Met	Leu	Leu	Cys	Val	Gln	Met
			20					25					30	
Leu	Phe	Leu	Met	Leu	Cys	Val	Leu	Asp	Tyr	Arg	Ile	Tyr	Cys	Ile
		35					40					45		
Ile	Tyr	Val	Ser	Ile	Ile	Leu	Leu	Met	Ser	Ile	Trp	Ile	Ile	Ser
	50					55					60			64
*														

<210> 732
 <211> 65
 <212> PRT
 <213> Homo sapiens

<400> 732														
Met	Cys	Tyr	Phe	Tyr	Asn	Thr	Ile	Ile	Leu	Thr	Leu	Gln	Gly	Ser
1				5					10					15
Met	Phe	Leu	Leu	Phe	Ser	Val	Val	Thr	Leu	Tyr	Leu	Phe	Ser	His
			20					25					30	
His	Pro	Thr	Pro	Ile	Ser	Ile	Phe	Ser	Asp	Val	Phe	Asn	Met	Tyr
		35					40					45		
Trp	Ile	Tyr	Met	Tyr	Ser	Tyr	Met	Val	Phe	Ser	Val	Asn	Leu	Tyr
	50					55					60			64
*														

<210> 733
 <211> 91
 <212> PRT
 <213> Homo sapiens

<400> 733														
Met	Ala	Ala	Ala	Pro	Gly	Leu	Leu	Val	Trp	Leu	Leu	Val	Leu	Arg

WO 01/55437

PCT/US01/02623

```

1          5          10          15
Pro Trp Arg Val Pro Gly Gln Leu Asp Pro Ser Thr Gly Arg Arg Phe
      20      25      30
Ser Glu His Lys Leu Cys Ala Asp Asp Glu Cys Ser Met Leu Met Tyr
      35      40      45
Arg Gly Glu Ala Leu Glu Asp Phe Thr Gly Pro Asp Cys Arg Phe Val
      50      55      60
Asn Phe Lys Lys Gly Asp Pro Val Tyr Val Tyr Tyr Lys Leu Ala Arg
      65      70      75      80
Gly Trp Pro Glu Val Trp Ala Gly Ser Lys *
      85      90

```

<210> 734
 <211> 65
 <212> PRT
 <213> Homo sapiens

```

<400> 734
Met Pro Gly Tyr Val Pro Leu Leu Leu Leu Leu Leu Leu Arg Cys
1          5          10          15
Ser Gln Arg Gly Gly Val Asn Phe Gly Glu Lys Asp Ala Lys Val
      20      25      30
Pro Gly Thr Trp Arg Asp Gly Val Arg Val Pro Gly Glu Gly Ala Ser
      35      40      45
Trp Asp Ser Asp Arg Ala Ser Pro Glu Arg Arg Tyr Gly Ile Gly Glu
      50      55      60      64
*
```

<210> 735
 <211> 71
 <212> PRT
 <213> Homo sapiens

```

<400> 735
Met Lys Phe Leu Leu Met Ser Leu Pro Tyr Arg His Leu Phe Cys Ile
1          5          10          15
Thr Gln Ala Ile Leu Ser Glu Ile Ala Glu Gly Ile Arg Asn Asp Pro
      20      25      30
Phe Lys Phe Tyr Leu Tyr Ser Val Leu Ala Leu Phe Leu His Tyr Tyr
      35      40      45
Met Tyr Val Phe Val Ser Arg Phe Ser Ile Tyr Tyr Leu Lys Leu Leu
      50      55      60
Arg Ile Phe Lys Phe Ser *
      65      70

```

<210> 736
 <211> 75
 <212> PRT
 <213> Homo sapiens

```

<400> 736
Met Arg Gln Ile Ala Val Phe Gln Arg Phe Met Phe Pro Phe Leu Leu
1          5          10          15
Pro Trp Leu Ser Cys Ile Phe Ser Ser Ser Gln Asn Ser Ile Tyr Tyr

```

```

      20      25      30
Val Ser Thr Phe Ile Lys Cys Leu Ala Leu Lys Ser Ile Ile Lys Arg
      35      40      45
Gln Arg Ser Glu Ile Asn Ser Gly Phe Leu Ala Ile Tyr His Ala Leu
      50      55      60
Arg Asn Gln Val Thr Arg Cys Gly Gly Leu *
      65      70      74

```

```

<210> 737
<211> 71
<212> PRT
<213> Homo sapiens

```

```

<400> 737
Met Pro Arg Arg Thr Arg Gly Gly Leu Trp Leu Cys Asn Ala His Lys
 1      5      10      15
Ser Cys Gln Lys Tyr Leu Ser Ser Leu Lys Leu Ser Thr Leu Leu Ser
      20      25      30
Pro Leu Leu Val Leu Pro Phe Tyr Thr Pro Ser Leu Lys Gly Trp Gly
      35      40      45
Ile Phe Val Leu Arg Phe Tyr Phe Met Val Ile Ile Ala Asp Cys Asn
      50      55      60
Leu Phe Lys Ile Ile Ile *
      65      70

```

```

<210> 738
<211> 53
<212> PRT
<213> Homo sapiens

```

```

<400> 738
Met Phe Thr His Trp Leu Gly Pro Pro Val Tyr Ile Lys Gln Phe Ile
 1      5      10      15
Val Met Ile Val Ser Ile Leu Thr Leu Phe Pro Val Leu Gln Gly Met
      20      25      30
Leu Arg Asn Phe Leu Tyr Leu Asn Ile Met Phe Val Val Ala Leu Leu
      35      40      45
Lys Ala Ile Leu *
      50      52

```

```

<210> 739
<211> 71
<212> PRT
<213> Homo sapiens

```

```

<400> 739
Met Glu Arg Gly Ala Gly Ala Lys Leu Leu Pro Leu Leu Leu Leu
 1      5      10      15
Arg Ala Thr Gly Phe Thr Cys Ala Gln Ala Asp Gly Arg Asn Gly Tyr
      20      25      30
Thr Ala Val Ile Glu Val Thr Ser Gly Gly Pro Trp Gly Asp Trp Ala
      35      40      45
Trp Pro Glu Met Cys Pro Asp Gly Phe Phe Ala Ser Gly Phe Ser Leu
      50      55      60
Lys Val Gly Ala Gln Ala *

```

<210> 740
<211> 104
<212> PRT
<213> Homo sapiens

<400> 740
Met Thr Gln Val Glu Arg Val Ile Val Phe Leu Thr Leu Ser Thr Leu
1 5 10 15
Ser Leu Ala Lys Thr Thr Gln Pro Ile Phe Met Asp Ser Tyr Glu Gly
20 25 30
Gln Glu Val Asn Ile Thr Cys Ser His Asn Asn Ile Val Thr Asn Asp
35 40 45
Tyr Ile Thr Trp Tyr Gln Gln Phe Pro Ser Gln Gly Pro Arg Phe Ile
50 55 60
Ile Gln Gly Tyr Gln Lys Lys Val Thr Asn Glu Val Ala Phe Leu Cys
65 70 75 80
Ile Pro Ala Asp Arg Lys Ser Ile Thr Leu Asn Leu Pro Arg Val Ser
85 90 95
Leu Glu Asp Thr Gly Gly Lys *
100 103

<210> 741
<211> 93
<212> PRT
<213> Homo sapiens

<400> 741
Met Thr Lys Leu Ala Gln Trp Leu Trp Gly Leu Ala Ile Leu Gly Ser
1 5 10 15
Thr Trp Val Ala Leu Thr Thr Gly Ala Leu Gly Leu Glu Leu Pro Leu
20 25 30
Ser Cys Gln Glu Val Leu Trp Pro Leu Pro Ala Tyr Leu Leu Val Ser
35 40 45
Ala Gly Cys Tyr Ala Leu Gly Thr Val Gly Tyr Arg Val Ala Thr Phe
50 55 60
His Asp Cys Glu Asp Ala Ala Arg Glu Leu Gln Ser Gln Ile Gln Glu
65 70 75 80
Ala Arg Ala Asp Leu Ala Arg Arg Gly Leu Arg Phe *
85 90 92

<210> 742
<211> 46
<212> PRT
<213> Homo sapiens

<400> 742
Met Ser Val Gly Leu Ala Gly Ala Val Gly Arg Arg Cys His Leu Ala
1 5 10 15
Leu Ala Val Leu His Asp Pro Leu Cys His His Gly Ser Leu Ala Thr
20 25 30
Ile Cys Lys Gln Pro Glu Val Cys Leu Phe Thr Ile Val *
35 40 45

<210> 743
 <211> 83
 <212> PRT
 <213> Homo sapiens

<400> 743
 Met Pro Phe Leu Leu Asn Gln Cys Gly Ser Leu Leu Tyr Tyr Leu Thr
 1 5 10 15
 Leu Ala Ser Thr Asp Leu Thr Leu Ala Val Pro Ile Cys Asn Ser Leu
 20 25 30
 Ala Ile Ile Phe Thr Leu Ile Val Gly Lys Ala Leu Gly Glu Asp Ile
 35 40 45
 Gly Gly Lys Arg Ala Val Ala Gly Met Val Leu Thr Val Ile Gly Ile
 50 55 60
 Ser Leu Cys Ile Thr Ser Ser Val Ser Lys Thr Gln Gly Gln Gln Ser
 65 70 75 80
 Thr Leu *
 82

<210> 744
 <211> 83
 <212> PRT
 <213> Homo sapiens

<400> 744
 Met Pro Phe Leu Leu Asn Gln Cys Gly Ser Leu Leu Tyr Tyr Leu Thr
 1 5 10 15
 Leu Ala Ser Thr Asp Leu Thr Leu Ala Val Pro Ile Cys Asn Ser Leu
 20 25 30
 Ala Ile Ile Phe Thr Leu Ile Val Gly Lys Ala Leu Gly Glu Asp Ile
 35 40 45
 Gly Gly Lys Arg Ala Val Ala Gly Met Val Leu Thr Val Ile Gly Ile
 50 55 60
 Ser Leu Cys Ile Thr Ser Ser Val Ser Lys Thr Gln Gly Gln Gln Ser
 65 70 75 80
 Thr Leu *
 82

<210> 745
 <211> 232
 <212> PRT
 <213> Homo sapiens

<400> 745
 Met Ala Leu Ile Tyr Val Met Leu Leu Leu Leu Gly Ala Phe Leu Gly
 1 5 10 15
 Ala Trp Pro Ala Leu Cys Gly Arg Tyr Lys Arg Trp Arg Lys His Gly
 20 25 30
 Val Phe Val Leu Leu Thr Thr Ala Thr Ser Val Ala Ile Trp Val Val
 35 40 45
 Trp Ile Val Met Tyr Thr Tyr Gly Asn Lys Gln His Asn Ser Pro Thr
 50 55 60
 Trp Asp Asp Pro Thr Leu Ala Ile Ala Leu Ala Asn Ala Trp Ala
 65 70 75 80
 Phe Val Leu Phe Tyr Val Ile Pro Glu Val Ser Gln Val Thr Lys Ser

WO 01/55437

PCT/US01/02623

```

      85      90      95
Ser Pro Glu Gln Ser Tyr Gln Gly Asp Met Tyr Pro Thr Arg Gly Val
      100      105      110
Gly Tyr Glu Thr Ile Leu Lys Glu Gln Lys Gly Gln Ser Met Phe Val
      115      120      125
Glu Asn Lys Ala Phe Ser Met Asp Glu Pro Val Ala Ala Lys Arg Pro
      130      135      140
Val Ser Pro Tyr Ser Gly Tyr Asn Gly Gln Leu Leu Thr Ser Val Tyr
      145      150      155      160
Gln Pro Thr Glu Met Ala Leu Met His Lys Val Pro Ser Glu Gly Ala
      165      170      175
Tyr Asp Ile Ile Leu Pro Arg Ala Thr Ala Asn Ser Gln Val Met Gly
      180      185      190
Ser Ala Asn Ser Thr Leu Arg Ala Glu Asp Met Tyr Ser Ala Gln Ser
      195      200      205
His Gln Ala Ala Thr Pro Pro Lys Asp Gly Lys Asn Ser Gln Val Phe
      210      215      220
Arg Asn Pro Tyr Val Trp Asp *
      225      230 231

```

<210> 746
 <211> 119
 <212> PRT
 <213> Homo sapiens

```

      <400> 746
Met Val Lys Thr Asp Ala His Leu Lys Asn Pro Pro Phe Ala Pro Phe
  1      5      10      15
Arg Val Tyr Thr Leu Thr Leu Ser Leu Leu Lys Leu Ser His Tyr
      20      25      30
Ser Cys Leu Trp Val Lys Lys Asp Phe Lys Asp Ser Ser Phe Tyr Asn
      35      40      45
Ser Asn Asn Asn Ser Asn Ser Asn His Cys Lys Ser Leu Leu Ser Thr
      50      55      60
His Tyr Met Pro Gly Ala Val Ile Ser Asn Leu Cys Leu Ile Ser Cys
      65      70      75      80
Lys Val Ser Ser Ser Pro Ile Lys Gln Thr His Gly Ile Ser Met Leu
      85      90      95
Gln Met Lys Arg Leu Lys His Thr Leu Ala Arg Leu Ala Pro Gly Thr
      100      105      110
His Gly Gly Ser Gln Asn *
      115      118

```

<210> 747
 <211> 300
 <212> PRT
 <213> Homo sapiens

```

      <400> 747
Met Gly Thr Lys Ala Gln Val Glu Arg Lys Leu Leu Cys Leu Phe Ile
  1      5      10      15
Leu Ala Ile Leu Leu Cys Ser Leu Ala Leu Gly Ser Val Thr Val His
      20      25      30
Ser Ser Glu Pro Glu Val Arg Ile Pro Glu Asn Asn Pro Val Lys Leu
      35      40      45
Ser Cys Ala Tyr Ser Gly Phe Ser Ser Pro Arg Val Glu Trp Lys Phe
      50      55      60
Asp Gln Gly Asp Thr Thr Arg Leu Val Cys Tyr Asn Asn Lys Ile Thr

```

65	70	75	80
Ala Ser Tyr Glu Asp Arg Val Thr Phe Leu Pro Thr Gly Ile Thr Phe			
	85	90	95
Lys Ser Val Thr Arg Glu Asp Thr Gly Thr Tyr Thr Cys Met Val Ser			
	100	105	110
Glu Glu Gly Gly Asn Ser Tyr Gly Glu Val Lys Val Lys Leu Ile Val			
	115	120	125
Leu Val Pro Pro Ser Lys Pro Thr Val Asn Ile Pro Ser Ser Ala Thr			
	130	135	140
Ile Gly Asn Arg Ala Val Leu Thr Cys Ser Glu Gln Asp Gly Ser Pro			
	145	150	155
Pro Ser Glu Tyr Thr Trp Phe Lys Asp Gly Ile Val Met Pro Thr Asn			
	165	170	175
Pro Lys Ser Thr Arg Ala Phe Ser Asn Ser Ser Tyr Val Leu Asn Pro			
	180	185	190
Thr Thr Gly Glu Leu Val Phe Asp Pro Leu Ser Ala Ser Asp Thr Gly			
	195	200	205
Glu Tyr Ser Cys Glu Ala Arg Asn Gly Tyr Gly Thr Pro Met Thr Ser			
	210	215	220
Asn Ala Val Arg Met Glu Ala Val Glu Arg Asn Val Gly Val Ile Val			
	225	230	235
Ala Ala Val Leu Val Thr Leu Ile Leu Leu Gly Ile Leu Val Phe Gly			
	245	250	255
Ile Trp Phe Ala Tyr Ser Arg Gly His Phe Asp Arg Thr Lys Lys Gly			
	260	265	270
Thr Ser Ser Lys Lys Val Ile Tyr Ser Gln Pro Ser Ala Arg Ser Glu			
	275	280	285
Gly Glu Phe Lys Gln Thr Ser Ser Phe Leu Val *			
	290	295	299

<210> 748

<211> 300

<212> PRT

<213> Homo sapiens

<400> 748

Met Gly Thr Lys Ala Gln Val Glu Arg Lys Leu Leu Cys Leu Phe Ile			
1	5	10	15
Leu Ala Ile Leu Leu Cys Ser Leu Ala Leu Gly Ser Val Thr Val His			
	20	25	30
Ser Ser Glu Pro Glu Val Arg Ile Pro Glu Asn Asn Pro Val Lys Leu			
	35	40	45
Ser Cys Ala Tyr Ser Gly Phe Ser Ser Pro Arg Val Glu Trp Lys Phe			
	50	55	60
Asp Gln Gly Asp Thr Thr Arg Leu Val Cys Tyr Asn Asn Lys Ile Thr			
	65	70	75
Ala Ser Tyr Glu Asp Arg Val Thr Phe Leu Pro Thr Gly Ile Thr Phe			
	85	90	95
Lys Ser Val Thr Arg Glu Asp Thr Gly Thr Tyr Thr Cys Met Val Ser			
	100	105	110
Glu Glu Gly Gly Asn Ser Tyr Gly Glu Val Lys Val Lys Leu Ile Val			
	115	120	125
Leu Val Pro Pro Ser Lys Pro Thr Val Asn Ile Pro Ser Ser Ala Thr			
	130	135	140
Ile Gly Asn Arg Ala Val Leu Thr Cys Ser Glu Gln Asp Gly Ser Pro			
	145	150	155
Pro Ser Glu Tyr Thr Trp Phe Lys Asp Gly Ile Val Met Pro Thr Asn			
	165	170	175
Pro Lys Ser Thr Arg Ala Phe Ser Asn Ser Ser Tyr Val Leu Asn Pro			
	180	185	190
Thr Thr Gly Glu Leu Val Phe Asp Pro Leu Ser Ala Ser Asp Thr Gly			

WO 01/55437

PCT/US01/02623

```

      195      200      205
Glu Tyr Ser Cys Glu Ala Arg Asn Gly Tyr Gly Thr Pro Met Thr Ser
  210      215      220
Asn Ala Val Arg Met Glu Ala Val Glu Arg Asn Val Gly Val Ile Val
  225      230      235      240
Ala Ala Val Leu Val Thr Leu Ile Leu Leu Gly Ile Leu Val Phe Gly
      245      250      255
Ile Trp Phe Ala Tyr Ser Arg Gly His Phe Asp Arg Thr Lys Lys Gly
      260      265      270
Thr Ser Ser Lys Lys Val Ile Tyr Ser Gln Pro Ser Ala Arg Ser Glu
      275      280      285
Gly Glu Phe Lys Gln Thr Ser Ser Phe Leu Val *
  290      295      299

```

<210> 749

<211> 98

<212> PRT

<213> Homo sapiens

<400> 749

```

Met Pro Ser Ser Phe Phe Leu Leu Leu Arg Phe Phe Leu Arg Ile Asp
  1      5      10      15
Gly Val Leu Ile Arg Met Asn Asp Thr Arg Leu Tyr His Glu Ala Asp
      20      25      30
Lys Thr Tyr Met Leu Arg Glu Tyr Thr Ser Arg Glu Ser Lys Ile Ser
      35      40      45
Ser Leu Met His Val Pro Pro Ser Leu Phe Thr Glu Pro Asn Glu Ile
      50      55      60
Ser Gln Tyr Leu Pro Ile Lys Glu Ala Val Cys Glu Lys Leu Ile Phe
      65      70      75      80
Pro Glu Arg Ile Asp Pro Asn Pro Ala Asp Ser Gln Lys Ser Thr Gln
      85      90      95
Val Glu
  98

```

<210> 750

<211> 107

<212> PRT

<213> Homo sapiens

<400> 750

```

Met Tyr Thr Arg Glu Leu Leu Ala Trp Ile Gln Gly Leu Tyr Thr Trp
  1      5      10      15
Glu Leu Leu Ala Trp Ile Gln His Leu Asn Thr Trp Glu Leu Leu Pro
      20      25      30
Trp Ile Arg Arg Leu Asn Ser Trp Ile Leu Leu Val Cys Pro Lys Leu
      35      40      45
Leu His Leu Trp Val Phe Gly Lys Thr Met Glu Ile Phe Val Leu Val
      50      55      60
Lys Asp Met Met Pro Phe Leu Tyr Lys Lys Glu Leu Cys Leu Val Pro
      65      70      75      80
Glu Val Ile Ser Leu Leu Ile Phe Ser His Leu Asp Thr Ser Lys Glu
      85      90      95
Leu Ser Ile Tyr Gly Leu Thr Gln Leu Ile *
      100      105 106

```

<210> 751
 <211> 107
 <212> PRT
 <213> Homo sapiens

<400> 751
 Met Tyr Thr Arg Glu Leu Leu Ala Trp Ile Gln Gly Leu Tyr Thr Trp
 1 5 10 15
 Glu Leu Leu Ala Trp Ile Gln His Leu Asn Thr Trp Glu Leu Leu Pro
 20 25 30
 Trp Ile Arg Arg Leu Asn Ser Trp Ile Leu Leu Val Cys Pro Lys Leu
 35 40 45
 Leu His Leu Trp Val Phe Gly Lys Thr Met Glu Ile Phe Val Leu Val
 50 55 60
 Lys Asp Met Met Pro Phe Leu Tyr Lys Lys Glu Leu Cys Leu Val Pro
 65 70 75 80
 Glu Val Ile Ser Leu Leu Ile Phe Ser His Leu Asp Thr Ser Lys Glu
 85 90 95
 Leu Ser Ile Tyr Gly Leu Thr Gln Leu Ile *
 100 105 106

<210> 752
 <211> 302
 <212> PRT
 <213> Homo sapiens

<400> 752
 Met Phe Ser His Leu Pro Phe Asp Cys Val Leu Leu Leu Leu Leu Leu
 1 5 10 15
 Leu Leu Thr Arg Ser Ser Glu Val Glu Tyr Arg Ala Glu Val Gly Gln
 20 25 30
 Asn Ala Tyr Leu Pro Cys Phe Tyr Thr Pro Ala Ala Pro Gly Asn Leu
 35 40 45
 Val Pro Val Cys Trp Gly Lys Gly Ala Cys Pro Val Phe Glu Cys Gly
 50 55 60
 Asn Val Val Leu Arg Thr Asp Glu Arg Asp Val Asn Tyr Trp Thr Ser
 65 70 75 80
 Arg Tyr Trp Leu Asn Gly Asp Phe Arg Lys Gly Asp Val Ser Leu Thr
 85 90 95
 Ile Glu Asn Val Thr Leu Ala Asp Ser Gly Ile Tyr Cys Cys Arg Ile
 100 105 110
 Gln Ile Pro Gly Ile Met Asn Asp Glu Lys Phe Asn Leu Lys Leu Val
 115 120 125
 Ile Lys Pro Ala Lys Val Thr Pro Ala Pro Thr Leu Gln Arg Asp Phe
 130 135 140
 Thr Ala Ala Phe Pro Arg Met Leu Thr Thr Arg Gly His Gly Pro Ala
 145 150 155 160
 Glu Thr Gln Thr Leu Gly Ser Leu Pro Asp Ile Asn Leu Thr Gln Ile
 165 170 175
 Ser Thr Leu Ala Asn Glu Leu Arg Asp Ser Arg Leu Ala Asn Asp Leu
 180 185 190
 Arg Asp Ser Gly Ala Thr Ile Arg Ile Gly Ile Tyr Ile Gly Ala Gly
 195 200 205
 Ile Cys Ala Gly Leu Ala Leu Ala Leu Ile Phe Gly Ala Leu Ile Phe
 210 215 220
 Lys Trp Tyr Ser His Ser Lys Glu Lys Ile Gln Asn Leu Ser Leu Ile
 225 230 235 240
 Ser Leu Ala Asn Leu Pro Pro Ser Gly Leu Ala Asn Ala Val Ala Glu
 245 250 255
 Gly Ile Arg Ser Glu Glu Asn Ile Tyr Thr Ile Glu Glu Asn Val Tyr

260 265 270
 Glu Val Glu Glu Pro Asn Glu Tyr Tyr Cys Tyr Val Ser Ser Arg Gln
 275 280 285
 Gln Pro Ser Gln Pro Leu Gly Cys Arg Phe Ala Met Pro *
 290 295 300 301

<210> 753
 <211> 57
 <212> PRT
 <213> Homo sapiens

<400> 753
 Met Gly Gly Val Ala Phe Leu Leu Trp Leu Thr Val Phe Ser Ala Trp
 1 5 10 15
 Thr Arg Leu Ser Ile Phe Ser Arg Leu Ser Asp Leu Pro Ser Phe Cys
 20 25 30
 Leu Pro Leu Ala Gly Thr Val Ser Ser Ser Leu Pro Glu Gly Ser Gly
 35 40 45
 Cys Ser Phe Ser Ser Ser Thr Lys *
 50 55 56

<210> 754
 <211> 113
 <212> PRT
 <213> Homo sapiens

<400> 754
 Met Cys His Trp Gln Asn Ser Phe Leu Cys Gln Ser Phe Leu Thr Phe
 1 5 10 15
 Gly Ser Ile Leu Ala Leu Leu Ala Gly Lys Ala Cys Tyr Pro Glu Ser
 20 25 30
 Glu Ser Ile Arg Glu Leu Phe Met Trp Ala Leu Glu Leu Tyr Ser Leu
 35 40 45
 Pro Phe Tyr Leu Phe Phe Lys Leu Ser Pro Leu Asn Leu Pro Gly Lys
 50 55 60
 Leu Gly Leu Ile Glu Thr Leu Ser Thr Cys Trp Gly Gln Lys Leu Asp
 65 70 75 80
 Pro Val Leu Glu Thr Leu Gln Arg Val Arg Ser Met Ala Ser Leu Ile
 85 90 95
 Ala Asn Phe Phe Val Pro Phe Ile Gln Lys Lys Gly Gln Leu Ile Thr
 100 105 110 112
 *

<210> 755
 <211> 233
 <212> PRT
 <213> Homo sapiens

<400> 755
 Met Ala Trp Ile Pro Leu Phe Leu Gly Val Leu Ala Tyr Cys Thr Gly
 1 5 10 15
 Ser Val Ala Ser Tyr Glu Leu Thr Gln Pro Pro Ser Val Ser Val Ser
 20 25 30
 Pro Gly Gln Thr Ala Ser Ile Thr Cys Ser Gly Asp Asn Leu Gly Asn

```

      35      40      45
Lys Tyr Val Ala Trp Tyr Gln Gln Lys Ala Gly Gln Ser Pro Val Leu
      50      55      60
Val Ile Tyr Gln Asp Asp Lys Arg Pro Ser Glu Ile Pro Glu Arg Phe
      65      70      75      80
Ser Gly Ser Asn Ser Gly Asn Thr Ala Thr Leu Thr Ile Ser Gly Thr
      85      90      95
Gln Ala Met Asp Glu Ala Asp Tyr Tyr Cys Gln Ala Trp Asp Ser Ser
      100      105      110
Thr Ala Val Met Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly Gln
      115      120      125
Pro Lys Ala Ala Pro Ser Val Thr Leu Phe Pro Pro Ser Ser Glu Glu
      130      135      140
Leu Gln Ala Asn Lys Ala Thr Leu Val Cys Leu Ile Ser Asp Phe Tyr
      145      150      155      160
Pro Gly Ala Val Thr Val Ala Trp Lys Ala Asp Ser Ser Pro Val Lys
      165      170      175
Ala Gly Val Glu Thr Thr Thr Pro Ser Lys Gln Ser Asn Asn Lys Tyr
      180      185      190
Ala Ala Ser Ser Tyr Leu Ser Leu Thr Pro Glu Gln Trp Lys Ser His
      195      200      205
Arg Ser Tyr Ser Cys Gln Val Thr His Glu Gly Ser Thr Val Glu Lys
      210      215      220
Thr Val Ala Pro Thr Glu Cys Ser *
      225      230      232

```

<210> 756
 <211> 48
 <212> PRT
 <213> Homo sapiens

```

      <400> 756
Met Gly Ala Gly Cys Thr Pro Val Val Leu Gly Ala Ala Leu Trp Leu
      1      5      10      15
Trp Arg Trp Phe Ser Arg Trp Gly Leu Gly Gly Leu Cys Trp Arg Pro
      20      25      30
Cys Thr Cys Thr Pro Cys His Ser Ala Ser Pro Gly Ala Gly Arg *
      35      40      45      47

```

<210> 757
 <211> 48
 <212> PRT
 <213> Homo sapiens

```

      <400> 757
Met Leu Gly Ile Cys Leu Cys Ser Ile Cys Val Leu Arg Leu Cys Leu
      1      5      10      15
Glu Lys Ser Lys Ile Phe Pro Pro Pro Arg Thr Ser Asp His Ser Leu
      20      25      30
Glu Gly Ser Val Thr Pro Val Glu Asn Ala Ala Arg Ser Gly Met *
      35      40      45      47

```

<210> 758
 <211> 148
 <212> PRT
 <213> Homo sapiens

<400> 758
 Met Ser Ile Thr Arg Leu Phe Pro Ala Leu Leu Glu Cys Phe Val Ile
 1 5 10 15
 Val Leu Cys Gly Tyr Ile Ala Gly Arg Ala Asn Val Ile Thr Ser Thr
 20 25 30
 Gln Ala Lys Gly Leu Gly Asn Phe Val Ser Arg Phe Ala Leu Pro Ala
 35 40 45
 Leu Leu Phe Lys Asn Met Val Val Leu Asn Phe Ser Asn Val Asp Trp
 50 55 60
 Ala Phe Leu Tyr Ser Ile Leu Ile Ala Lys Ala Ser Val Phe Phe Ile
 65 70 75 80
 Val Cys Val Leu Thr Leu Leu Val Ala Ser Pro Asp Ser Arg Phe Ser
 85 90 95
 Lys Ala Gly Leu Phe Pro Ile Phe Ala Thr Gln Ser Asn Asp Phe Ala
 100 105 110
 Leu Gly Tyr Pro Ile Gly Lys Leu Ile Phe Ile Phe Gln Val Phe Lys
 115 120 125
 Lys Phe Asn Phe Asn Leu Phe Arg His Leu Leu Val Thr Asp Ser Tyr
 130 135 140
 Ser His Ile *
 145 147

<210> 759
 <211> 106
 <212> PRT
 <213> Homo sapiens

<400> 759
 Met Trp Leu Gly Gln Ala Phe Trp Ala Trp Leu Ser Phe Met Asn Arg
 1 5 10 15
 Trp His Ser Lys Phe Leu Met Val Arg Ser Arg Gly Glu Cys Gly Ala
 20 25 30
 Gln Arg Gln Leu Leu Cys Val Phe Val Phe Arg Asp Ser Leu Arg Glu
 35 40 45
 Gly Met Pro Arg Arg Asn Met Val Ser Ser Glu Ala His Gly Cys Leu
 50 55 60
 Leu Arg Thr Ala Val Phe Tyr Ala Thr Tyr Pro Cys Thr Ser Tyr Ala
 65 70 75 80
 Lys Glu Thr Lys Pro Ser Ala Cys Leu Phe Pro Leu Leu Ile Ile Gly
 85 90 95
 Lys Trp Met Leu Trp Ser Phe Lys Asn *
 100 105

<210> 760
 <211> 115
 <212> PRT
 <213> Homo sapiens

<400> 760
 Met Ser Ser Trp Phe Leu Arg Ala Gly His Gly Leu Ile Trp Val Leu
 1 5 10 15
 Phe Phe Arg Ile Gly Gln Ala Ala Val Gly Val Ser Ala Gly Pro Gly
 20 25 30
 Gly Ser Pro Lys Ala His Leu Gly Arg Val Ala Ser Gln His Pro His
 35 40 45
 Gly Ala Glu Ser Arg Ala Cys Leu Leu Ala Arg Gly Leu Pro Lys Ala

WO 01/55437

PCT/US01/02623

```

      50      55      60
Leu Ser Ser Met Leu Ala Val Asp Cys Arg Pro Arg Ser Gly Pro Leu
65      70      75      80
His Arg Ala Ala His Ile Met Ala Ala Ser Leu Ile Ser Lys Pro Val
      85      90      95
Arg Gly Cys Leu Ser Glu Asp Asp Ile Pro Ser Pro Leu Ser Asp Ser
      100      105      110
Ala Tyr *
      114

```

<210> 761
 <211> 86
 <212> PRT
 <213> Homo sapiens

```

      <400> 761
Met Gly Trp Asp Ser Lys Leu Leu Phe Leu Phe Thr Cys Leu Ser Cys
1      5      10      15
Val Thr Thr Cys Ser Val Ser Thr Cys Phe Gln Ala Pro Leu Gly Ser
      20      25      30
Ser Ser Phe Ala Pro Ser Gly Ile His Gly Thr Leu Glu Phe Pro Val
      35      40      45
Val Arg Gly Ala His Lys Asn Phe Leu Pro Met Gly Pro Met Tyr Leu
      50      55      60
Phe Pro Ile Thr Ala Gly Gln Pro Leu Thr Leu Phe Val Lys Thr Gln
      65      70      75      80
Ser Ala Gly Arg Asn *
      85

```

<210> 762
 <211> 97
 <212> PRT
 <213> Homo sapiens

```

      <400> 762
Met Cys His Val His Cys Cys Trp Lys Phe Ile Val Glu Leu Leu Gln
1      5      10      15
Cys Val Ile Gln Gly Ile Arg Cys Leu Tyr Phe Gly Asn Ile Cys Asn
      20      25      30
Gly Thr Cys Phe Leu Glu Ser Cys Phe Phe Gly Met Ser Phe Gln Gly
      35      40      45
Ala Asn Phe Leu Phe Phe Gly Asn Ser His Ser Ser Ser Phe Tyr Cys
      50      55      60
Arg Arg Met Ser Pro Phe Pro Arg Gly Glu Gln Val Leu His Phe Ile
      65      70      75      80
Cys His Ser Val Cys Gln Cys Gln Cys Gln Cys Trp Cys Ser Gly Gly
      85      90      95      96
*
```

<210> 763
 <211> 116
 <212> PRT
 <213> Homo sapiens
 <221> misc_feature

<222> (1)...(116)

<223> Xaa = any amino acid or nothing

<400> 763

```

Met Leu Leu Trp Val Phe Leu Gln Leu Asn Tyr Lys Ile Gln Ala Ile
 1           5           10           15
Pro Thr Tyr Glu Thr Val Met Thr Phe Phe Lys Ser Phe Pro Glu Asn
      20           25           30
Cys Cys Phe Leu Asp Arg Asp Ile Gly Gln Ser Leu Arg Pro Leu Phe
      35           40           45
Leu Cys Leu Arg Leu His Gly Ile Thr Lys Gly Lys Asp Xaa Glu Val
      50           55           60
Leu Arg His Leu Asn Phe Phe Pro Glu Ser Trp Leu Asp Gln Val Thr
      65           70           75           80
Val Asn His Tyr His Ala Leu Glu Asn Gly Gly Asp Met Val His Leu
      85           90           95
Lys Asp Leu Asn Thr Gln Ala Val Arg Phe Gly Leu Leu Phe Asn Gln
      100           105           110
Glu Asn Thr Thr
      115 116

```

<210> 764

<211> 289

<212> PRT

<213> Homo sapiens

<400> 764

```

Met Leu Ala Met Gly Ala Leu Ala Gly Phe Trp Ile Leu Cys Leu Leu
 1           5           10           15
Thr Tyr Gly Tyr Leu Ser Trp Gly Gln Ala Leu Glu Glu Glu Glu
      20           25           30
Gly Ala Leu Leu Ala Gln Ala Gly Glu Lys Leu Glu Pro Ser Thr Thr
      35           40           45
Ser Thr Ser Gln Pro His Leu Ile Phe Ile Leu Ala Asp Asp Gln Gly
      50           55           60
Phe Arg Asp Val Gly Tyr His Gly Ser Glu Ile Lys Thr Pro Thr Leu
      65           70           75           80
Asp Lys Leu Ala Ala Glu Gly Val Lys Leu Glu Asn Tyr Tyr Val Gln
      85           90           95
Pro Ile Cys Thr Pro Ser Arg Ser Gln Phe Ile Thr Gly Lys Tyr Gln
      100           105           110
Ile His Thr Gly Leu Gln His Ser Ile Ile Arg Pro Thr Gln Pro Asn
      115           120           125
Cys Leu Pro Leu Asp Asn Ala Thr Leu Pro Gln Lys Leu Lys Glu Val
      130           135           140
Gly Tyr Ser Thr His Met Val Gly Lys Trp His Leu Gly Phe Tyr Arg
      145           150           155           160
Lys Glu Cys Met Pro Thr Arg Arg Gly Phe Asp Thr Phe Phe Gly Ser
      165           170           175
Leu Leu Gly Ser Gly Asp Tyr Tyr Thr His Tyr Lys Cys Asp Ser Pro
      180           185           190
Gly Met Cys Gly Tyr Asp Leu Tyr Glu Asn Asp Asn Ala Ala Trp Asp
      195           200           205
Tyr Asp Asn Gly Ile Tyr Ser Thr Gln Met Tyr Thr Gln Arg Val Gln
      210           215           220
Gln Ile Leu Ala Ser His Asn Pro Thr Lys Pro Ile Phe Leu Tyr Ile
      225           230           235           240
Ala Tyr Gln Ala Val His Ser Pro Leu Gln Ala Pro Gly Arg Tyr Phe
      245           250           255
Glu His Tyr Arg Ser Ile Ile Asn Ile Asn Arg Arg Arg Tyr Ala Ala

```

260 265 270
 Met Leu Ser Cys Leu Asp Glu Ala Ile Asn Asn Val Thr Leu Ala Leu
 275 280 285

Lys
 289

<210> 765
 <211> 72
 <212> PRT
 <213> Homo sapiens

<400> 765
 Met Arg Ser Tyr Lys Pro Asn Pro Leu Leu Phe Pro Lys Leu Gln Ile
 1 5 10 15
 Leu Ile Phe Leu Thr Ser Tyr Leu Ile Phe Thr Leu Arg Tyr Leu Pro
 20 25 30
 Gly Val Phe Asn Ile Leu Phe Lys Thr Val Leu Leu Val Phe Phe Leu
 35 40 45
 Gln Asp Tyr Ser Leu Leu Ile Ser Ala Asn Ser Ser Ser Phe Gln Val
 50 55 60
 Leu Ser Val Lys Thr Tyr Asn *
 65 70 71

<210> 766
 <211> 47
 <212> PRT
 <213> Homo sapiens

<400> 766
 Met Asp Leu Tyr Val Val Ile Phe Trp Leu Val Tyr Ile Phe Ser Thr
 1 5 10 15
 Tyr Ile Ile Thr Tyr Ile Lys Gly Asn Val Gly Leu Cys Phe Gln Ile
 20 25 30
 Leu Phe Gln Leu Ser Phe Glu Arg Arg Pro Lys Ser Val Arg *
 35 40 45 46

<210> 767
 <211> 118
 <212> PRT
 <213> Homo sapiens

<400> 767
 Met Ser Phe Pro Ile His Leu Arg Phe Phe Ser Leu Phe Phe Leu His
 1 5 10 15
 Trp Leu Leu Leu Ser Gly Phe Ser Ser Leu Leu Pro Trp Ala Ser Ala
 20 25 30
 Phe Val Gln Tyr Ser Arg Cys Pro Glu His Thr Pro Ser Leu Cys Pro
 35 40 45
 Gly Gly Ala Asn Asn Pro Leu Leu Gln Ala Pro Thr Gln Met Leu Pro
 50 55 60
 Pro Leu Gly Cys Leu Leu Cys Ala Leu Pro Ala Ser Pro Ser Pro Tyr
 65 70 75 80
 Leu Cys Trp His Leu Leu Tyr His Ala Phe Arg Asn Leu Leu Ile Pro
 85 90 95
 Leu Ile Ser Gly Ala Pro Cys Gly Ser Gly Ile Pro Lys Phe Ser Lys

100 105 110
 Cys Leu Ser Val Ser *
 115 117

<210> 768
 <211> 57
 <212> PRT
 <213> Homo sapiens

<400> 768
 Met Lys Asn Leu Leu Met Val His Leu Trp Gly Ile Cys Thr Leu Tyr
 1 5 10 15
 Leu Glu Phe Ser Ala Val Ser Ala Ile Ser Phe Leu Asn His Ile Ser
 20 25 30
 Val Lys Thr Tyr Phe Pro Asn Ser Ser Ser Phe Tyr Arg Ala Thr Pro
 35 40 45
 Met Val Leu Asp Phe Ile Leu His *
 50 55 56

<210> 769
 <211> 57
 <212> PRT
 <213> Homo sapiens

<400> 769
 Met Leu Gly Trp Gln Ile Trp Arg Leu Arg Pro Gln Leu Leu Ser Phe
 1 5 10 15
 His Thr Gln Asp Arg Cys His Trp Ser Ile Thr Ser Gln Cys Ser Lys
 20 25 30
 Pro Glu Ser Gln Glu Ser Phe Leu Ser Thr Ile His Leu Leu Glu Gly
 35 40 45
 Ala Gln Glu Gly Thr Pro Thr Glu *
 50 55 56

<210> 770
 <211> 58
 <212> PRT
 <213> Homo sapiens

<400> 770
 Met Arg Glu Thr Gly Ile Leu Leu Cys Phe Leu Ser Ala Leu Asn Tyr
 1 5 10 15
 Ile Thr Leu Val Thr Ser Gln Lys Leu Ile Leu Ser Lys Lys Met His
 20 25 30
 Val Asn His Tyr Leu Pro Lys Lys Thr Ile Ser Lys Phe Leu Tyr Phe
 35 40 45
 Val Lys Val Phe His Asp Leu Val Leu *
 50 55 57

<210> 771
 <211> 74
 <212> PRT
 <213> Homo sapiens

<400> 771
 Met Lys Gln Leu Ile Tyr Trp Phe Ser Leu Phe Phe Cys Cys Ser Cys
 1 5 10 15
 Cys His Leu Asn Arg His Gly Asn Arg Leu His Thr Thr Glu Ile Phe
 20 25 30
 Pro Ser Leu Phe His Leu Val Cys Cys Ala Asp Pro Leu Pro Trp Met
 35 40 45
 Pro Ala His Ser Phe Gly Ser Pro Phe Trp Ser Leu Phe Ser Thr Tyr
 50 55 60
 Pro Gly Arg Asn Ser Arg Gly Cys Gln *
 65 70 73

<210> 772
 <211> 72
 <212> PRT
 <213> Homo sapiens

<400> 772
 Met Leu Leu Phe Ser Leu Asn Phe Phe Phe Trp Lys Ile Val Met Phe
 1 5 10 15
 His Lys Asn Val Ile Phe Ile Leu Thr Cys Asn Gly Phe Ile Ile Val
 20 25 30
 Thr Phe Lys Trp Ile Asp Lys Phe Ile Leu Asn Ile Ser Ile Leu Ile
 35 40 45
 Ser Asn Thr Val Asn Val Asn Ser His Asn Pro His Lys Gln Lys Phe
 50 55 60
 Phe Gly Asp Leu Ser Asn Phe *
 65 70 71

<210> 773
 <211> 63
 <212> PRT
 <213> Homo sapiens

<400> 773
 Met Gln Leu Lys Phe Ser Gln Leu Thr Thr Ser Ser Leu Ser Phe Ser
 1 5 10 15
 Ser Ala Leu Trp Leu Leu Ala Phe Ser Arg Val Phe Leu Leu Ala Asp
 20 25 30
 Ser Asn Leu Phe Val Lys Pro Ser Ser Asp Leu Gly Ser Asp Thr Cys
 35 40 45
 Ser Ala Asp Phe Cys Asp Phe Arg Lys Leu Ser Phe Phe Arg *
 50 55 60 62

<210> 774
 <211> 430
 <212> PRT
 <213> Homo sapiens

<400> 774
 Met Cys Pro Gly Ala Leu Trp Val Ala Leu Pro Leu Leu Ser Leu Leu
 1 5 10 15
 Ala Gly Ser Leu Gln Gly Lys Pro Leu Gln Ser Trp Gly Arg Gly Ser

			20					25					30				
Ala	Gly	Gly	Asn	Ala	His	Ser	Pro	Leu	Gly	Val	Pro	Gly	Gly	Gly	Leu		
		35					40					45					
Pro	Glu	His	Thr	Phe	Asn	Leu	Lys	Met	Phe	Leu	Glu	Asn	Val	Lys	Val		
	50					55					60						
Asp	Phe	Leu	Arg	Ser	Leu	Asn	Leu	Ser	Gly	Val	Pro	Ser	Gln	Asp	Lys		
	65				70					75					80		
Thr	Arg	Val	Glu	Pro	Gln	Tyr	Met	Ile	Asp	Leu	Tyr	Asn	Arg	Tyr			
				85				90					95				
Thr	Ser	Asp	Lys	Ser	Thr	Thr	Pro	Ala	Ser	Asn	Ile	Val	Arg	Ser	Phe		
			100					105				110					
Ser	Met	Glu	Asp	Ala	Ile	Ser	Ile	Thr	Ala	Thr	Glu	Asp	Phe	Pro	Phe		
		115					120					125					
Gln	Lys	His	Ile	Leu	Leu	Phe	Asn	Ile	Ser	Ile	Pro	Arg	His	Glu	Gln		
	130					135					140						
Ile	Thr	Arg	Ala	Glu	Leu	Arg	Leu	Tyr	Val	Ser	Cys	Gln	Asn	His	Val		
	145				150					155					160		
Asp	Pro	Ser	His	Asp	Leu	Lys	Gly	Ser	Val	Val	Ile	Tyr	Asp	Val	Leu		
			165					170					175				
Asp	Gly	Thr	Asp	Ala	Trp	Asp	Ser	Ala	Thr	Glu	Thr	Lys	Thr	Phe	Leu		
			180					185					190				
Val	Ser	Gln	Asp	Ile	Gln	Asp	Glu	Gly	Trp	Glu	Thr	Leu	Glu	Val	Ser		
	195					200						205					
Ser	Ala	Val	Lys	Arg	Trp	Val	Arg	Ser	Asp	Ser	Thr	Lys	Ser	Lys	Asn		
	210					215						220					
Lys	Leu	Glu	Val	Thr	Val	Glu	Ser	His	Arg	Lys	Gly	Cys	Asp	Thr	Leu		
	225				230					235					240		
Asp	Ile	Ser	Val	Pro	Gly	Ser	Arg	Asn	Leu	Pro	Phe	Phe	Val	Val			
			245					250					255				
Phe	Ser	Asn	Asp	His	Ser	Ser	Gly	Thr	Lys	Glu	Thr	Arg	Leu	Glu	Leu		
		260						265					270				
Arg	Glu	Met	Ile	Ser	His	Glu	Gln	Glu	Ser	Val	Leu	Lys	Lys	Leu	Ser		
		275					280					285					
Lys	Asp	Gly	Ser	Thr	Glu	Ala	Gly	Glu	Ser	Ser	His	Glu	Glu	Asp	Thr		
	290					295					300						
Asp	Gly	His	Val	Ala	Ala	Gly	Ser	Thr	Leu	Ala	Arg	Arg	Lys	Arg	Ser		
	305				310					315					320		
Ala	Gly	Ala	Gly	Ser	His	Cys	Gln	Lys	Thr	Ser	Leu	Arg	Val	Asn	Phe		
				325					330					335			
Glu	Asp	Ile	Gly	Trp	Asp	Ser											

```
<210> 775
<211> 56
<212> PRT
<213> Homo sapiens
```

<400> 775
Met Phe Gly Met Ile Lys Arg Arg Val Arg Arg Ala Val Phe Val Gly
1 5 10 15
Arg Thr Val Leu Cys Gly Ser Cys Asn Ser Gly Ile Ile Met His Arg

20 25 30
 Gly Lys Thr Pro Pro Leu Lys Met Val Cys Arg Phe Glu Glu Ser Phe
 35 40 45
 Ser Cys Leu Phe Leu Asn Ser *
 50 55

<210> 776
 <211> 49
 <212> PRT
 <213> Homo sapiens

<400> 776
 Met Gly Phe Leu Phe Leu Asp Ser Ala Leu Met Gln Thr Trp Val
 1 5 10 15
 Thr Val Ile Asp Val Ser Leu His His Val Glu Ile Lys Ala Pro Arg
 20 25 30
 Ile Arg Leu Met Trp Ser Leu Pro Leu Arg Arg Gln Lys Tyr Thr Met
 35 40 45 48
 *

<210> 777
 <211> 107
 <212> PRT
 <213> Homo sapiens

<400> 777
 Met Leu Ala Thr Leu Ala Cys Met Ala Ile Pro Trp Thr His Leu Gly
 1 5 10 15
 Cys Ser Cys Leu Leu Ala Cys Leu Pro Phe Ser His His Leu Gly Leu
 20 25 30
 Ser Glu Asp Ile Ile Ser Ser Glu Lys Pro Ser Val Thr Met Leu Ser
 35 40 45
 Lys Ile Leu Gln His Phe Ser His Pro Leu Ser His Tyr Ser Ala Phe
 50 55 60
 Ser Glu Thr Leu Val Leu Pro Glu Thr Tyr Leu Phe Thr Cys Leu Ala
 65 70 75 80
 Ser Phe Leu Pro His Tyr His Val Ser Phe Leu Arg Val Arg Asp Leu
 85 90 95
 Val Arg Asp Asn His Cys Ile Leu Arg Val *
 100 105 106

<210> 778
 <211> 47
 <212> PRT
 <213> Homo sapiens

<400> 778
 Met His Thr Pro His Leu Pro Asn Ile Ile Val Tyr Phe Ile Leu Leu
 1 5 10 15
 Tyr Ile Cys Ser Gln Tyr Leu Tyr Leu Leu Thr Ile Arg His Asn His
 20 25 30
 Leu Thr Gln Ser Leu Phe Tyr Asn Lys Leu Leu Ser Val Leu *
 35 40 45 46

<210> 779
 <211> 70
 <212> PRT
 <213> Homo sapiens

<400> 779
 Met Pro Val Thr Pro Asp Pro Ser Ala Val Ser Leu Phe Val Thr Pro
 1 5 10 15
 Trp Pro Leu Leu Cys Leu Pro Trp Pro His Arg Val Pro Gly Gln
 20 25 30
 Ser His Pro Gly Leu His Ser Arg Ala Pro Val His Arg Leu Lys Pro
 35 40 45
 Gly Pro Pro Ala Arg Leu Gln Leu Pro Ala Ala His Arg Asn Leu Arg
 50 55 60
 His Leu Ser Ile Phe *
 65 69

<210> 780
 <211> 70
 <212> PRT
 <213> Homo sapiens

<400> 780
 Met Ser Trp Tyr Thr Cys Gln Cys Leu Phe Phe Leu Ser Asn Thr Leu
 1 5 10 15
 Arg Asn Gly Ala Thr Ser Cys His Trp Tyr Cys Ser Pro Asp Asp Met
 20 25 30
 Gln Met Val Asp Phe Ser Ser Thr Tyr Glu Arg Ile Phe Arg Pro Phe
 35 40 45
 Val Phe Lys Ile Lys Gly Pro Asp Ser Phe Arg Ile Asp Met Ser Pro
 50 55 60
 Ile Pro Glu Asp Ile *
 65 69

<210> 781
 <211> 69
 <212> PRT
 <213> Homo sapiens

<400> 781
 Met Ala Arg Ser Ala Arg Thr Phe Leu Leu Ser Ser Thr Trp His Leu
 1 5 10 15
 Thr Lys Phe Pro Met Ser Ala Gly Tyr Phe Ser Pro Cys Ser Trp Leu
 20 25 30
 Ala Ala Val Ile Arg Leu Ile Gln Arg Val Leu Met Phe Phe Phe
 35 40 45
 Arg Tyr Arg Ala Leu Val His Phe Thr Lys Ala Arg Ile Thr Val Leu
 50 55 60
 Thr Ala Asn Leu *
 65 68

<210> 782
 <211> 192

<212> PRT

<213> Homo sapiens

<400> 782

```

Met Ala Gly Pro Glu Leu Leu Leu Asp Ser Asn Ile Arg Leu Trp Val
 1          5          10          15
Val Leu Pro Ile Val Ile Ile Thr Phe Phe Val Gly Met Ile Arg His
      20          25          30
Tyr Val Ser Ile Leu Leu Gln Ser Asp Lys Lys Leu Thr Gln Glu Gln
      35          40          45
Val Ser Asp Ser Gln Val Leu Ile Arg Ser Arg Val Leu Arg Glu Asn
      50          55          60
Gly Lys Tyr Ile Pro Lys Gln Ser Phe Leu Thr Arg Lys Tyr Tyr Phe
 65          70          75          80
Asn Asn Pro Glu Asp Gly Phe Phe Lys Lys Thr Lys Arg Lys Val Val
      85          90          95
Pro Pro Ser Pro Met Thr Asp Pro Thr Met Leu Thr Asp Met Met Lys
      100          105          110
Gly Asn Val Thr Asn Val Leu Pro Met Ile Leu Ile Gly Gly Trp Ile
      115          120          125
Asn Met Thr Phe Ser Gly Phe Val Thr Thr Lys Val Pro Phe Pro Leu
 130          135          140
Thr Leu Arg Phe Lys Pro Met Leu Gln Gln Gly Ile Glu Leu Leu Thr
 145          150          155          160
Leu Asp Ala Ser Trp Val Ser Ser Ala Ser Leu Gly Thr Ser Pro Met
      165          170          175
Val Phe Gly Leu Arg Ser Ile Tyr Ser Ser Asp Ser Gly Pro Arg *
      180          185          190 191

```

<210> 783

<211> 52

<212> PRT

<213> Homo sapiens

<400> 783

```

Met Leu Phe Val Val Leu Pro Leu Leu Ile Ile Val Phe Asn Ile Pro
 1          5          10          15
Met Arg Glu Ala Val Phe Asp Phe Leu Phe Met Ile Lys Ile Ile Lys
      20          25          30
Val Leu Lys Val Phe Tyr Cys Ile Ala Cys Phe Ile Ile Lys Gln Ala
      35          40          45
Leu Val Phe *
      50 51

```

<210> 784

<211> 65

<212> PRT

<213> Homo sapiens

<400> 784

```

Met Val Thr Tyr Phe Ile Lys Cys Phe His Tyr Glu Val Ser Phe Leu
 1          5          10          15
Leu Trp Phe Ala Val Val Arg Asn Asp Val Asp Arg Pro Val Ser Leu
      20          25          30
Ser Leu Phe Ser Ser Tyr Ser Leu Phe Ser Thr Tyr Pro Asp Thr Cys
      35          40          45
Pro Leu Phe Lys Leu Pro Thr His Leu Leu Cys Cys Leu Glu Glu Ile

```

*

<210> 785
 <211> 58
 <212> PRT
 <213> Homo sapiens

<400> 785
 Met Ala Val Pro Ile Met Leu Phe Tyr Phe Ser Leu Leu Tyr Lys Ser
 1 5 10 15
 Leu Ala Phe Phe Glu Ser Tyr Ser Phe Ala Glu Tyr His Pro Pro Thr
 20 25 30
 Ser Gly Arg Gln Gly Cys Val Lys Asp Ile Leu Lys Arg Leu Ile Trp
 35 40 45
 Phe Leu Ile His Leu His Leu Asp Ala Gly
 50 55 58

<210> 786
 <211> 87
 <212> PRT
 <213> Homo sapiens

<400> 786
 Met Ala Val Lys Asn Val Ala Leu Val Ile Thr Trp Ala Tyr Gly Phe
 1 5 10 15
 Val Lys Val Thr Leu Ser Leu Leu Val Phe Cys Val Tyr Cys Met Tyr
 20 25 30
 Val Ile Leu His Leu Arg Met Tyr Ile Thr His Lys Gly Ala Cys Arg
 35 40 45
 His Met Ser Ala Ser Trp Leu Ala Thr Asn Cys Leu Trp Pro Trp Gly
 50 55 60
 Cys His Ser Thr Phe His Leu Glu Ile Glu Asn Asn Asn Thr Ile Ile
 65 70 75 80
 Leu Leu Glu Leu Cys Ala *
 85 86

<210> 787
 <211> 66
 <212> PRT
 <213> Homo sapiens

<400> 787
 Met Phe Gly Val Ser Gly Phe Cys Leu Leu Phe Thr Phe Leu Glu Leu
 1 5 10 15
 Val Leu Leu Gly Leu Gly Arg Trp Trp Arg Thr Trp Lys His Lys Ser
 20 25 30
 Ser Ser Ser Lys Tyr Phe Leu Thr Ser Glu Ser Thr Arg Arg His Lys
 35 40 45
 Lys Ala Thr Asp Ser Leu Pro Val Val Glu Thr Lys Glu Gln Phe Gln
 50 55 60
 Glu Ala
 65 66

<210> 788
 <211> 440
 <212> PRT
 <213> Homo sapiens

<400> 788
 Met Ala Ala Ala Arg Cys Trp Arg Pro Leu Leu Arg Gly Pro Arg Leu
 1 5 10 15
 Ser Leu His Thr Ala Ala Asn Ala Ala Thr Ala Thr Glu Thr Thr
 20 25 30
 Cys Gln Asp Val Ala Ala Thr Pro Val Ala Arg Tyr Pro Pro Ile Val
 35 40 45
 Ala Ser Met Thr Ala Asp Ser Lys Ala Ala Arg Leu Arg Arg Ile Glu
 50 55 60
 Arg Trp Gln Ala Thr Val His Ala Ala Glu Ser Val Asp Glu Lys Leu
 65 70 75 80
 Arg Ile Leu Thr Lys Met Gln Phe Met Lys Tyr Met Val Tyr Pro Gln
 85 90 95
 Thr Phe Ala Leu Asn Ala Asp Arg Trp Tyr Gln Tyr Phe Thr Lys Thr
 100 105 110
 Val Phe Leu Ser Gly Leu Pro Pro Pro Pro Ala Glu Pro Glu Pro Glu
 115 120 125
 Pro Glu Pro Glu Pro Glu Pro Ala Leu Asp Leu Ala Leu Arg Ala
 130 135 140
 Val Ala Cys Asp Cys Leu Leu Gln Glu His Phe Tyr Leu Arg Arg Arg
 145 150 155 160
 Arg Arg Val His Arg Tyr Glu Glu Ser Glu Val Ile Ser Leu Pro Phe
 165 170 175
 Leu Asp Gln Leu Val Ser Thr Leu Val Gly Leu Leu Ser Pro His Asn
 180 185 190
 Pro Ala Leu Ala Ala Ala Ala Leu Asp Tyr Arg Cys Pro Val His Phe
 195 200 205
 Tyr Trp Val Arg Gly Glu Glu Ile Ile Pro Arg Gly His Arg Arg Gly
 210 215 220
 Arg Ile Asp Asp Leu Arg Tyr Gln Ile Asp Asp Lys Pro Asn Asn Gln
 225 230 235 240
 Ile Arg Ile Ser Lys Gln Leu Ala Glu Phe Val Pro Leu Asp Tyr Ser
 245 250 255
 Val Pro Ile Glu Ile Pro Thr Ile Lys Cys Lys Pro Asp Lys Leu Pro
 260 265 270
 Leu Phe Lys Arg Gln Tyr Glu Asn His Ile Phe Val Gly Ser Lys Thr
 275 280 285
 Ala Asp Pro Cys Cys Tyr Gly His Thr Gln Phe His Leu Leu Pro Asp
 290 295 300
 Lys Leu Arg Arg Glu Arg Leu Leu Arg Gln Asn Cys Ala Asp Gln Ile
 305 310 315 320
 Glu Val Val Phe Arg Ala Asn Ala Ile Ala Ser Leu Phe Ala Trp Thr
 325 330 335
 Gly Ala Gln Ala Met Tyr Gln Gly Phe Trp Ser Glu Ala Asp Val Thr
 340 345 350
 Arg Pro Phe Val Ser Gln Ala Val Ile Thr Asp Gly Lys Tyr Phe Ser
 355 360 365
 Phe Phe Cys Tyr Gln Leu Asn Thr Leu Ala Leu Thr Thr Gln Ala Asp
 370 375 380
 Gln Asn Asn Pro Arg Lys Asn Ile Cys Trp Gly Thr Gln Ser Lys Pro
 385 390 395 400
 Leu Tyr Glu Thr Ile Glu Asp Asn Asp Val Lys Gly Phe Asn Asp Asp
 405 410 415
 Val Leu Leu Gln Ile Val His Phe Leu Leu Asn Arg Pro Lys Glu Glu
 420 425 430
 Lys Ser Gln Leu Leu Glu Asn *

<210> 789
<211> 67
<212> PRT
<213> Homo sapiens

<400> 789
Met Gly Leu Phe Ala Ile His Ile Ser Ser Trp Leu Leu Arg Ala Cys
1 5 10 15
Phe Leu Ile Ile Glu Asn Phe Glu Ser Val Leu Tyr Ile Ser Asn Thr
20 25 30
His Pro Phe Ile Tyr Met Gly Leu His Arg Phe Phe Ser Gln Pro Ser
35 40 45
Val Trp Ile Leu Leu Phe Leu Thr Gly Pro Leu Asn Thr Lys Ser Tyr
50 55 60
Tyr His *
65 66

<210> 790
<211> 77
<212> PRT
<213> Homo sapiens

<400> 790
Met Phe Lys Val Val Phe Cys Phe Gly Leu Val Trp Phe Cys Phe Gln
1 5 10 15
Arg Ala His Lys Pro Ile Arg Phe Glu Lys His Asn Phe Thr Ile Asn
20 25 30
Glu Gly Asn Leu Phe Ser Met Asn Ile Pro Ile Val Thr Ile Arg Ser
35 40 45
His His Arg Thr Ser Cys Tyr His Lys Leu Ile Thr Cys Glu Gln Gln
50 55 60
Thr Val Phe Thr Asn Ile Lys Arg His Ser Lys Leu *
65 70 75 76

<210> 791
<211> 54
<212> PRT
<213> Homo sapiens

<400> 791
Met Asn Leu Tyr Leu Phe Ala Val Leu Phe Phe Tyr Val Phe Leu His
1 5 10 15
Ile Lys Ile Ile Phe Ile Cys Phe Ala Thr Lys Trp His Asn Leu Phe
20 25 30
Ser Lys Phe Ser Tyr Phe Cys Ile Leu His Val Lys Ala Leu Ser Leu
35 40 45
Asn Leu Gly Ser Gly *
50 53

<210> 792
<211> 52

<212> PRT

<213> Homo sapiens

<400> 792

```

Met Tyr Ser Leu Ser Leu Gln Leu Pro Val Leu Cys Val Leu Lys Ser
 1           5           10           15
Phe Lys Ala Tyr Ser Leu Leu Trp Gly Val Ser Thr Gly Val Lys Glu
           20           25           30
Gly Phe Ala Gly Arg Thr Ile Val Asn His Glu Ser Tyr Tyr Leu Arg
           35           40           45
Ile Val Trp *
           50  51

```

<210> 793

<211> 63

<212> PRT

<213> Homo sapiens

<400> 793

```

Met Cys Thr Leu Phe Met His Leu Leu Phe Cys His Leu Gln Ser Ile
 1           5           10           15
Gln Leu Lys Gln Glu Leu Arg Leu Asn Tyr Leu Thr Leu Thr Gln Phe
           20           25           30
Trp Gln Arg Cys Tyr Ser Glu Met Ile Phe Phe Cys Leu Ser Lys Val
           35           40           45
Phe Leu His Val Phe Gln Asp Gly Leu Glu His His Leu Glu *
           50           55           60           62

```

<210> 794

<211> 51

<212> PRT

<213> Homo sapiens

<400> 794

```

Met Phe Ala Thr Thr Leu Gly Val Met Gly Leu Trp Ser Gly Ile Ile
 1           5           10           15
Ile Cys Thr Val Phe Gln Ala Val Cys Phe Leu Gly Phe Ile Ile Gln
           20           25           30
Leu Asn Trp Lys Lys Ala Cys Gln Gln Gly Ala Leu Lys Thr Leu Lys
           35           40           45
Glu Phe *
           50

```

<210> 795

<211> 70

<212> PRT

<213> Homo sapiens

<400> 795

```

Met His Leu Thr Leu Ser Leu Leu Leu Phe Ser Leu His Phe Pro Thr
 1           5           10           15
Tyr Ile Ile Arg Val Asn Phe Cys Leu Val Ser Asn Leu Phe Gln Arg
           20           25           30
Met Arg Ser Thr Lys Leu Leu Arg Leu Ile Asp Leu Asp Phe Ser Phe

```


35 40 45
 Thr Phe Ser Leu Leu Asp Leu Pro Pro Val Asn Glu Tyr Asp Met Tyr
 50 55 60
 Ile Arg Asn Phe Gly Lys
 65 70

<210> 796
 <211> 158
 <212> PRT
 <213> Homo sapiens

<400> 796
 Met Val Lys Ser Val Ile Phe Leu Ser Phe Trp Gln Gly Met Leu Leu
 1 5 10 15
 Ala Ile Leu Glu Lys Cys Gly Ala Ile Pro Lys Ile His Ser Ala Arg
 20 25 30
 Val Ser Val Gly Glu Gly Thr Val Ala Ala Gly Tyr Gln Asp Phe Ile
 35 40 45
 Ile Cys Gly Glu Met Phe Phe Ala Ala Leu Ala Leu Arg His Ala Phe
 50 55 60
 Thr Tyr Lys Val Tyr Ala Asp Lys Arg Leu Asp Ala Gln Gly Arg Cys
 65 70 75 80
 Ala Pro Met Lys Ser Ile Ser Ser Ser Leu Lys Glu Thr Met Asn Pro
 85 90 95
 His Asp Ile Val Gln Asp Ala Ile His Asn Phe Ser Pro Ala Tyr Gln
 100 105 110
 Gln Tyr Thr Gln Gln Ser Thr Leu Glu Pro Gly Pro Thr Trp Arg Gly
 115 120 125
 Gly Ala His Gly Leu Ser Arg Ser His Ser Leu Ser Gly Ala Arg Asp
 130 135 140
 Asn Glu Lys Thr Leu Leu Ser Ser Asp Asp Glu Phe *
 145 150 155 157

<210> 797
 <211> 64
 <212> PRT
 <213> Homo sapiens

<400> 797
 Met Gly Lys Lys Val Thr Leu Leu Leu Gln Lys Cys Ala Trp Leu Leu
 1 5 10 15
 Leu Val Cys Cys Leu Phe Thr Gly Ile Lys Tyr Leu Asn Lys Cys Phe
 20 25 30
 Ile Thr Asp Arg Glu Leu Leu Arg Asp Val His Asn Ala Leu Asn Ile
 35 40 45
 Leu Arg His Asn Phe Tyr Val Asn Trp Ala Ser Leu Asn Thr Phe *
 50 55 60 63

<210> 798
 <211> 90
 <212> PRT
 <213> Homo sapiens

<400> 798
 Met Val Gln Leu Phe Ile Pro Ile Leu Lys Phe Gln Leu Gly Tyr Ser

WO 01/55437

PCT/US01/02623

```

1           5           10           15
Val Leu Ser Leu Cys Asn His Val Leu Glu Phe Leu Phe Pro Ser Ser
      20      25      30
Leu Ser Gly Ile Phe Ser Ser Ser Leu Pro Leu Leu Leu Pro Phe Pro
      35      40      45
Leu Ser Leu Pro Ser Leu Pro Pro Ser Leu Phe Pro Ser Leu Arg Val
      50      55      60
Leu Leu Cys His Pro His Trp Ser Val Ala Ser Asn Ser Trp Ala Val
      65      70      75      80
Ala Ile Leu Leu Pro Gln Pro Pro Glu *
      85      89

```

<210> 799

<211> 57

<212> PRT

<213> Homo sapiens

<400> 799

```

Met Tyr Leu Leu Ile Leu Leu Ser Thr Lys Phe Ser Cys Ile Ser Ser
1           5           10           15
Leu Pro Gly Leu Asp Tyr Arg Gln Asp Ser Met Leu Cys Gln Gly Ile
      20      25      30
Ser Leu Ala Pro Thr Leu Leu Ile Ile His Leu Phe Met Cys Ile Met
      35      40      45
Ile Lys Tyr Lys Pro Leu Ile Arg *
      50      55      56

```

<210> 800

<211> 47

<212> PRT

<213> Homo sapiens

<400> 800

```

Met Cys Val His Pro Tyr Val Cys Thr Cys Ala Cys Met His Val Cys
1           5           10           15
Val Cys Leu Cys Ala Trp Cys Leu Ser Gln Pro Gly Gly Leu Gly Gly
      20      25      30
Phe Ser Glu Glu Val Thr Ser Leu Pro Arg Pro Arg Ala Leu *
      35      40      45      46

```

<210> 801

<211> 119

<212> PRT

<213> Homo sapiens

<400> 801

```

Met Leu Phe Leu Lys Lys Ile Gln Phe Leu Lys Cys Asn Lys Val Phe
1           5           10           15
Arg Ser Leu Asp Phe Cys Val Ala Leu Pro Leu Leu Phe Ser Ser Ser
      20      25      30
Ala Val Leu Gln Ile Thr Pro Val Asp Thr Phe Ser Asp Pro His Leu
      35      40      45
Val Leu Thr Leu Val Lys Leu Leu Met Asn Ile Leu Asn Ile Ala Val
      50      55      60
Ile Ser Leu Thr Phe Pro Gly Glu Tyr Glu Val Ser Leu Ala Phe Glu

```

WO 01/55437

PCT/US01/02623

```

65          70          75          80
Asn Ile Leu Met Tyr Thr His Ala Phe Ile Ile Cys Phe Cys Asn Arg
      85          90          95
Gln Trp Leu Phe Lys Ser Asn Ser Glu Ser Asn Leu Ser Ser Asn Val
      100          105          110
Asn Leu Phe Asp Ser Cys *
      115          118

```

```

<210> 802
<211> 112
<212> PRT
<213> Homo sapiens

```

```

<400> 802
Met Gln Leu His Gly Lys Gly Ser Gln Asp Pro Ser Thr Lys Gly His
 1          5          10          15
Ile Lys Ala Leu Gln Thr Val Thr Ser Phe Leu Leu Cys Ala Ile
      20          25          30
Tyr Phe Leu Ser Met Ile Ile Ser Val Cys Asn Phe Gly Arg Leu Glu
      35          40          45
Lys Gln Pro Val Phe Met Phe Cys Gln Ala Ile Ile Phe Ser Tyr Pro
      50          55          60
Ser Thr His Pro Phe Ile Leu Ile Leu Gly Asn Lys Lys Leu Lys Gln
      65          70          75          80
Ile Phe Leu Ser Val Leu Arg His Val Arg Tyr Trp Val Lys Asp Arg
      85          90          95
Ser Leu Arg Leu His Arg Phe Thr Arg Gly Ala Leu Cys Val Phe *
      100          105          110 111

```

```

<210> 803
<211> 319
<212> PRT
<213> Homo sapiens

```

```

<400> 803
Met Ala Pro Trp Ala Glu Ala Glu His Ser Ala Leu Asn Pro Leu Arg
 1          5          10          15
Ala Val Trp Leu Thr Leu Thr Ala Ala Phe Leu Leu Thr Leu Leu
      20          25          30
Gln Leu Leu Pro Pro Gly Leu Leu Pro Gly Cys Ala Ile Phe Gln Asp
      35          40          45
Leu Ile Arg Tyr Gly Lys Thr Lys Cys Gly Glu Pro Ser Arg Pro Ala
      50          55          60
Ala Cys Arg Ala Phe Asp Val Pro Lys Arg Tyr Phe Ser His Phe Tyr
      65          70          75          80
Ile Ile Ser Val Leu Trp Asn Gly Phe Leu Leu Trp Cys Leu Thr Gln
      85          90          95
Ser Leu Phe Leu Gly Ala Pro Phe Pro Ser Trp Leu His Gly Leu Leu
      100          105          110
Arg Ile Leu Gly Ala Ala Gln Phe Gln Gly Gly Glu Leu Ala Leu Ser
      115          120          125
Ala Phe Leu Val Leu Val Phe Leu Trp Leu His Ser Leu Arg Arg Leu
      130          135          140
Phe Glu Cys Leu Tyr Val Ser Val Phe Ser Asn Val Met Ile His Val
      145          150          155          160
Val Gln Tyr Cys Phe Gly Leu Val Tyr Tyr Val Leu Val Gly Leu Thr
      165          170          175
Val Leu Ser Gln Val Pro Met Asp Gly Arg Asn Ala Tyr Ile Thr Gly

```

```

      180      185      190
Lys Asn Leu Leu Met Gln Ala Arg Trp Phe His Ile Leu Gly Met Met
      195      200      205
Met Phe Ile Trp Ser Ser Ala His Gln Tyr Lys Cys His Val Ile Leu
      210      215      220
Gly Asn Leu Arg Lys Asn Lys Ala Gly Val Val Ile His Cys Asn His
      225      230      235      240
Arg Ile Pro Phe Gly Asp Trp Phe Glu Tyr Val Ser Ser Pro Asn Tyr
      245      250      255
Leu Ala Glu Leu Met Ile Tyr Val Ser Met Ala Val Thr Phe Gly Phe
      260      265      270
His Asn Leu Thr Trp Trp Leu Val Val Thr Asn Val Phe Phe Asn Gln
      275      280      285
Ala Leu Ser Ala Phe Leu Ser His Gln Phe Tyr Lys Ser Lys Phe Val
      290      295      300
Ser Tyr Pro Lys His Arg Lys Ala Phe Leu Pro Phe Leu Phe *
      305      310      315      318

```

<210> 804

<211> 385

<212> PRT

<213> Homo sapiens

<400> 804

```

Met Glu Phe Gly Leu Ser Trp Leu Phe Leu Val Ala Ile Leu Lys Gly
  1      5      10      15
Val Gln Cys Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln
      20      25      30
Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe
      35      40      45
Ser Ser Tyr Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu
      50      55      60
Glu Trp Val Ser Gly Leu Ser Gly Ser Gly Gly Ser Ser Thr Tyr Tyr
      65      70      75      80
Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys
      85      90      95
Gly Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Asp Asp Thr Ala
      100      105      110
Arg Tyr Tyr Cys Ala Lys Gly Gly Val Glu Leu Ala Ser Thr Lys Pro
      115      120      125
Ser Ser Ile Trp Arg Leu Asn Pro Ile Arg Tyr Trp Tyr Phe Asp Leu
      130      135      140
Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Asp Gly Ser Ser
      145      150      155      160
Gly Gly Ser Gly Gly Ala Ser Thr Gly Glu Ile Val Leu Thr Gln Ser
      165      170      175
Pro Gly Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys
      180      185      190
Arg Ala Ser Gln Ser Val Ser Ser Ser Tyr Leu Ala Trp Tyr Gln Gln
      195      200      205
Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile Tyr Gly Ala Ser Ser Arg
      210      215      220
Ala Thr Gly Ile Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp
      225      230      235      240
Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu Asp Phe Ala Val Tyr
      245      250      255
Tyr Cys Gln Gln Tyr Gly Ser Ser Pro Thr Thr Phe Gly Gln Gly Thr
      260      265      270
Lys Val Asp Ile Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe
      275      280      285
Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys

```

```

      290              295              300
Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val
305              310              315              320
Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln
      325              330              335
Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser
      340              345              350
Lys Ala Asp Tyr Glu Lys His Lys Val Tyr Ala Cys Glu Val Thr His
      355              360              365
Gln Gly Leu Ser Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
      370              375              380              384

```

*

```

<210> 805
<211> 385
<212> PRT
<213> Homo sapiens

```

```

      <400> 805
Met Glu Phe Gly Leu Ser Trp Leu Phe Leu Val Ala Ile Leu Lys Gly
1              5              10              15
Val Gln Cys Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln
      20              25              30
Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe
      35              40              45
Ser Ser Tyr Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu
      50              55              60
Glu Trp Val Ser Gly Leu Ser Gly Ser Gly Gly Ser Ser Thr Tyr Tyr
65              70              75              80
Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys
      85              90              95
Gly Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Asp Asp Thr Ala
      100              105              110
Arg Tyr Tyr Cys Ala Lys Gly Gly Val Glu Leu Ala Ser Thr Lys Pro
      115              120              125
Ser Ser Ile Trp Arg Leu Asn Pro Ile Arg Tyr Trp Tyr Phe Asp Leu
      130              135              140
Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Asp Gly Ser Ser
145              150              155              160
Gly Gly Ser Gly Gly Ala Ser Thr Gly Glu Ile Val Leu Thr Gln Ser
      165              170              175
Pro Gly Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys
      180              185              190
Arg Ala Ser Gln Ser Val Ser Ser Ser Tyr Leu Ala Trp Tyr Gln Gln
      195              200              205
Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile Tyr Gly Ala Ser Ser Arg
      210              215              220
Ala Thr Gly Ile Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp
225              230              235              240
Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu Asp Phe Ala Val Tyr
      245              250              255
Tyr Cys Gln Gln Tyr Gly Ser Ser Pro Thr Thr Phe Gly Gln Gly Thr
      260              265              270
Lys Val Asp Ile Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe
      275              280              285
Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys
      290              295              300
Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val
305              310              315              320
Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln

```

```

          325          330          335
Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser
          340          345          350
Lys Ala Asp Tyr Glu Lys His Lys Val Tyr Ala Cys Glu Val Thr His
          355          360          365
Gln Gly Leu Ser Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
          370          375          380          384
*
```

```

<210> 806
<211> 385
<212> PRT
<213> Homo sapiens
```

```

<400> 806
Met Glu Phe Gly Leu Ser Trp Leu Phe Leu Val Ala Ile Leu Lys Gly
  1          5          10          15
Val Gln Cys Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln
          20          25          30
Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe
          35          40          45
Ser Ser Tyr Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu
          50          55          60
Glu Trp Val Ser Gly Leu Ser Gly Ser Gly Ser Ser Thr Tyr Tyr
          65          70          75          80
Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys
          85          90          95
Gly Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Asp Asp Thr Ala
          100          105          110
Arg Tyr Tyr Cys Ala Lys Gly Gly Val Glu Leu Ala Ser Thr Lys Pro
          115          120          125
Ser Ser Ile Trp Arg Leu Asn Pro Ile Arg Tyr Trp Tyr Phe Asp Leu
          130          135          140
Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Asp Gly Ser Ser
          145          150          155          160
Gly Gly Ser Gly Gly Ala Ser Thr Gly Glu Ile Val Leu Thr Gln Ser
          165          170          175
Pro Gly Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys
          180          185          190
Arg Ala Ser Gln Ser Val Ser Ser Ser Tyr Leu Ala Trp Tyr Gln Gln
          195          200          205
Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile Tyr Gly Ala Ser Ser Arg
          210          215          220
Ala Thr Gly Ile Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp
          225          230          235          240
Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu Asp Phe Ala Val Tyr
          245          250          255
Tyr Cys Gln Gln Tyr Gly Ser Ser Pro Thr Thr Phe Gly Gln Gly Thr
          260          265          270
Lys Val Asp Ile Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe
          275          280          285
Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys
          290          295          300
Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val
          305          310          315          320
Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln
          325          330          335
Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser
          340          345          350
Lys Ala Asp Tyr Glu Lys His Lys Val Tyr Ala Cys Glu Val Thr His
```

355 360 365
 Gln Gly Leu Ser Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
 370 375 380 384

*

<210> 807
 <211> 385
 <212> PRT
 <213> Homo sapiens

<400> 807
 Met Glu Phe Gly Leu Ser Trp Leu Phe Leu Val Ala Ile Leu Lys Gly
 1 5 10 15
 Val Gln Cys Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln
 20 25 30
 Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe
 35 40 45
 Ser Ser Tyr Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu
 50 55 60
 Glu Trp Val Ser Gly Leu Ser Gly Ser Gly Gly Ser Ser Thr Tyr Tyr
 65 70 75 80
 Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys
 85 90 95
 Gly Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Asp Asp Thr Ala
 100 105 110
 Arg Tyr Tyr Cys Ala Lys Gly Gly Val Glu Leu Ala Ser Thr Lys Pro
 115 120 125
 Ser Ser Ile Trp Arg Leu Asn Pro Ile Arg Tyr Trp Tyr Phe Asp Leu
 130 135 140
 Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly Asp Gly Ser Ser
 145 150 155 160
 Gly Gly Ser Gly Gly Ala Ser Thr Gly Glu Ile Val Leu Thr Gln Ser
 165 170 175
 Pro Gly Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys
 180 185 190
 Arg Ala Ser Gln Ser Val Ser Ser Ser Tyr Leu Ala Trp Tyr Gln Gln
 195 200 205
 Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile Tyr Gly Ala Ser Ser Arg
 210 215 220
 Ala Thr Gly Ile Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp
 225 230 235 240
 Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu Asp Phe Ala Val Tyr
 245 250 255
 Tyr Cys Gln Gln Tyr Gly Ser Ser Pro Thr Thr Phe Gly Gln Gly Thr
 260 265 270
 Lys Val Asp Ile Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe
 275 280 285
 Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys
 290 295 300
 Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val
 305 310 315 320
 Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln
 325 330 335
 Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser
 340 345 350
 Lys Ala Asp Tyr Glu Lys His Lys Val Tyr Ala Cys Glu Val Thr His
 355 360 365
 Gln Gly Leu Ser Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
 370 375 380 384

*

<210> 808
 <211> 47
 <212> PRT
 <213> Homo sapiens

<400> 808
 Met Phe Pro Pro Tyr Phe Ser Leu Ile Leu Leu Leu Phe Thr Phe Ala
 1 5 10 15
 Ser Lys Phe Phe Leu Ser Leu Asn Leu Lys Lys Ser Asn Ile Val Lys
 20 25 30
 Ala Arg Ile Glu Ser Thr Lys Thr Val Ile Ser Lys Arg Cys *
 35 40 45 46

<210> 809
 <211> 77
 <212> PRT
 <213> Homo sapiens

<400> 809
 Met Gln Ser Val Ile Arg Lys Gln Phe Thr Ala Leu Ala Gly Phe Cys
 1 5 10 15
 Phe Trp Phe Cys Leu Phe Thr Leu Ala Val Leu Ser Leu Thr Leu Leu
 20 25 30
 Ile Cys Lys Leu Arg Ile Met Pro Phe Lys Leu Glu Gly Leu Phe Gln
 35 40 45
 Glu Leu Asn Lys Ser Trp His Met Lys Leu Leu Ser Gln Asp Arg Glu
 50 55 60
 Leu Ile Asn Met Leu Leu Leu Met Gly Arg Ser *
 65 70 75 76

<210> 810
 <211> 1189
 <212> PRT
 <213> Homo sapiens

<400> 810
 Met Asp Leu Pro Arg Gly Leu Val Val Ala Trp Ala Leu Ser Leu Trp
 1 5 10 15
 Pro Gly Phe Thr Asp Thr Phe Asn Met Asp Thr Arg Lys Pro Arg Val
 20 25 30
 Ile Pro Gly Ser Arg Thr Ala Phe Phe Gly Tyr Thr Val Gln Gln His
 35 40 45
 Asp Ile Ser Gly Asn Lys Trp Leu Val Val Gly Ala Pro Leu Glu Thr
 50 55 60
 Asn Gly Tyr Gln Lys Thr Gly Asp Val Tyr Lys Cys Pro Val Ile His
 65 70 75 80
 Gly Asn Cys Thr Lys Leu Asn Leu Gly Arg Val Thr Leu Ser Asn Val
 85 90 95
 Ser Glu Arg Lys Asp Asn Met Arg Leu Gly Leu Ser Leu Ala Thr Asn
 100 105 110
 Pro Lys Asp Asn Ser Phe Leu Ala Cys Ser Pro Leu Trp Ser His Glu
 115 120 125
 Cys Gly Ser Ser Tyr Tyr Thr Thr Gly Met Cys Ser Arg Val Asn Ser

130 135 140
 Asn Phe Arg Phe Ser Lys Thr Val Ala Pro Ala Leu Gln Arg Cys Gln
 145 150 155 160
 Thr Tyr Met Asp Ile Val Ile Val Leu Asp Gly Ser Asn Ser Ile Tyr
 165 170 175
 Pro Trp Val Glu Val Gln His Phe Leu Ile Asn Ile Leu Lys Lys Phe
 180 185 190
 Tyr Ile Gly Pro Gly Gln Ile Gln Val Gly Val Val Gln Tyr Gly Glu
 195 200 205
 Asp Val Val His Glu Phe His Leu Asn Asp Tyr Arg Ser Val Lys Asp
 210 215 220
 Val Val Glu Ala Ala Ser His Ile Glu Gln Arg Gly Gly Thr Glu Thr
 225 230 235 240
 Arg Thr Ala Phe Gly Ile Glu Phe Ala Arg Ser Glu Ala Phe Gln Lys
 245 250 255
 Gly Gly Arg Lys Gly Ala Lys Lys Val Met Ile Val Ile Thr Asp Gly
 260 265 270
 Glu Ser His Asp Ser Pro Asp Leu Glu Lys Val Ile Gln Gln Ser Glu
 275 280 285
 Arg Asp Asn Val Thr Arg Tyr Ala Val Ala Val Leu Gly Tyr Tyr Asn
 290 295 300
 Arg Arg Gly Ile Asn Pro Glu Thr Phe Leu Asn Glu Ile Lys Tyr Ile
 305 310 315 320
 Ala Ser Asp Pro Asp Asp Lys His Phe Phe Asn Val Thr Asp Glu Ala
 325 330 335
 Ala Leu Lys Asp Ile Val Asp Ala Leu Gly Asp Arg Ile Phe Ser Leu
 340 345 350
 Glu Gly Thr Asn Lys Asn Glu Thr Ser Phe Gly Leu Glu Met Ser Gln
 355 360 365
 Thr Gly Phe Ser Ser His Val Val Glu Asp Gly Val Leu Leu Gly Ala
 370 375 380
 Val Gly Ala Tyr Asp Trp Asn Gly Ala Val Leu Lys Glu Thr Ser Ala
 385 390 395 400
 Gly Lys Val Ile Pro Leu Arg Glu Ser Tyr Leu Lys Glu Phe Pro Glu
 405 410 415
 Glu Leu Lys Asn His Gly Ala Tyr Leu Gly Tyr Thr Val Thr Ser Val
 420 425 430
 Val Ser Ser Arg Gln Gly Arg Val Tyr Val Ala Gly Ala Pro Arg Phe
 435 440 445
 Asn His Thr Gly Lys Val Ile Leu Phe Thr Met His Asn Asn Arg Ser
 450 455 460
 Leu Thr Ile His Gln Ala Met Arg Gly Gln Gln Ile Gly Ser Tyr Phe
 465 470 475 480
 Gly Ser Glu Ile Thr Ser Val Asp Ile Asp Gly Asp Gly Val Thr Asp
 485 490 495
 Val Leu Leu Val Gly Ala Pro Met Tyr Phe Asn Glu Gly Arg Glu Arg
 500 505 510
 Gly Lys Val Tyr Val Tyr Glu Leu Arg Gln Asn Arg Phe Val Tyr Asn
 515 520 525
 Gly Thr Leu Lys Asp Ser His Ser Tyr Gln Asn Ala Arg Phe Gly Ser
 530 535 540
 Ser Ile Ala Ser Val Arg Asp Leu Asn Gln Asp Ser Tyr Asn Asp Val
 545 550 555 560
 Val Val Gly Ala Pro Leu Glu Asp Asn His Ala Gly Ala Ile Tyr Ile
 565 570 575
 Phe His Gly Phe Arg Gly Ser Ile Leu Lys Thr Pro Lys Gln Arg Ile
 580 585 590
 Thr Ala Ser Glu Leu Ala Thr Gly Leu Gln Tyr Phe Gly Cys Ser Ile
 595 600 605
 His Gly Gln Leu Asp Leu Asn Glu Asp Gly Leu Ile Asp Leu Ala Val
 610 615 620
 Gly Ala Leu Gly Asn Ala Val Ile Leu Trp Ser Arg Pro Val Val Gln
 625 630 635 640
 Ile Asn Ala Ser Leu His Phe Glu Pro Ser Lys Ile Asn Ile Phe His

669

```

      1155      1160      1165
Phe Arg Ser Ala Arg Arg Arg Arg Glu Pro Gly Leu Asp Pro Thr Pro
      1170      1175      1180
Lys Val Leu Glu *
1185      1188

```

```
<210> 811
<211> 53
<212> PRT
<213> Homo sapiens
```

```

      <400> 811
Met Ala Leu Asn Ile Ile Ile Asn Pro Val Trp Phe Cys His Cys Leu
  1             5             10             15
Thr Cys Thr Ile His Ile Asp Phe His Ile Leu Phe Ile Lys Ile Phe
      20             25             30
Lys His Met Phe Phe Arg Ser Leu Trp Ser Ser Trp Leu Ser His Gln
      35             40             45
Leu Asp His Ile *
      50             52

```

```
<210> 812
<211> 78
<212> PRT
<213> Homo sapiens
```

<400> 812															
Met	Ala	Ile	Phe	Pro	Leu	Trp	Lys	Gly	Val	Asn	Val	Leu	Val	Cys	Ile
1				5					10					15	
Phe	Ser	Ser	Phe	Ile	Met	Leu	Asn	Ile	Tyr	Cys	Thr	Leu	Leu	Ile	Trp
			20					25					30		
Lys	Phe	Ile	Tyr	Ser	Ala	Phe	Phe	Cys	Tyr	Ile	Thr	Ser	Leu	Met	Ile
		35					40					45			
Phe	Pro	Phe	Ser	Phe	Phe	Cys	Ser	Phe	Phe	Leu	Asp	Leu	Leu	Lys	Val
	50					55					60				
Ile	Val	Tyr	Ile	Phe	Phe	Leu	Tyr	Leu	Tyr	Ser	Ser	Arg	*		
65					70					75		77			

```
<210> 813
<211> 49
<212> PRT
<213> Homo sapiens
```

<u><400> 813</u>															
Met	Gly	Tyr	Leu	Leu	Trp	Leu	Val	Leu	Ser	Ile	Leu	Val	Cys	Thr	Glu
1				5					10					15	
Leu	Gly	Leu	Gly	Arg	Leu	Thr	Phe	Pro	Leu	Asp	Ser	Glu	Ser	Pro	Arg
			20					25					30		
Thr	Ser	Tyr	Lys	Val	Arg	Pro	Trp	Val	Val	Leu	Glu	Ala	Trp	Val	Trp
		35					40					45			48

<210> 814
 <211> 88
 <212> PRT
 <213> Homo sapiens

<400> 814
 Met Cys Leu Ser His Leu Val Ser Leu Phe Pro Ala Ala Thr Ala Phe
 1 5 10 15
 Leu Ile Asn Lys Val Pro Leu Pro Val Asp Lys Leu Ala Pro Leu Pro
 20 25 30
 Leu Asp Asn Ile Leu Pro Phe Met Asp Pro Leu Lys Leu Leu Leu Lys
 35 40 45
 Thr Leu Gly Ile Ser Val Glu His Leu Val Glu Gly Leu Arg Lys Cys
 50 55 60
 Val Asn Glu Leu Gly Pro Glu Ala Ser Glu Ala Val Lys Lys Leu Leu
 65 70 75 80
 Glu Ala Leu Ser His Leu Val *
 85 87

<210> 815
 <211> 237
 <212> PRT
 <213> Homo sapiens

<400> 815
 Met Ala Trp Ile Pro Leu Phe Leu Gly Val Leu Ala Tyr Cys Thr Gly
 1 5 10 15
 Ala Val Ala Ser Tyr Glu Leu Thr Gln Pro Pro Ser Val Ser Val Ser
 20 25 30
 Pro Gly Gln Thr Ala Ser Ile Thr Cys Ser Gly Asp Arg Leu Gly Asp
 35 40 45
 Lys Ile Ala Cys Trp Tyr Gln Leu Lys Pro Gly Gln Ser Pro Leu Val
 50 55 60
 Val Ile His Gln Asp Thr Lys Arg Pro Ser Gly Ile Pro Glu Arg Phe
 65 70 75 80
 Ser Gly Ser Asn Ser Gly Asn Thr Ala Thr Leu Thr Ile Ser Gly Thr
 85 90 95
 Gln Ala Met Asp Glu Ala Asp Tyr Tyr Cys Gln Ala Trp Asp Ser Ser
 100 105 110
 Ser Tyr Val Ala Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly Gln
 115 120 125
 Pro Lys Ala Ala Pro Ser Val Thr Leu Phe Pro Pro Ser Ser Glu Glu
 130 135 140
 Leu Gln Ala Asn Lys Ala Thr Leu Val Cys Leu Ile Ser Asp Phe Tyr
 145 150 155 160
 Pro Gly Val Val Thr Val Ala Trp Lys Ala Asp Ser Ser Pro Val Lys
 165 170 175
 Ala Gly Val Glu Thr Thr Thr Pro Ser Lys Gln Ser Asn Asn Lys Tyr
 180 185 190
 Ala Val Ser Ser Tyr Leu Ser Leu Thr Pro Glu Gln Trp Lys Ser His
 195 200 205
 Arg Ser Tyr Ser Cys Gln Val Thr His Glu Gly Ser Thr Val Glu Lys
 210 215 220
 Thr Val Ala Pro Thr Glu Tyr Leu Leu Arg Val Tyr *
 225 230 235 236

<210> 816
 <211> 514

<212> PRT

<213> Homo sapiens

<400> 816

```

Met Pro Gly Leu Gly Arg Arg Ala Gln Trp Leu Cys Trp Trp Trp Gly
 1      5      10      15
Leu Leu Cys Ser Cys Cys Gly Pro Pro Pro Leu Arg Pro Pro Leu Pro
      20      25      30
Ala Ala Ala Ala Ala Ala Ala Gly Gly Gln Leu Leu Gly Asp Gly Gly
      35      40      45
Ser Pro Gly Arg Thr Glu Gln Pro Pro Pro Ser Pro Gln Ser Ser Ser
      50      55      60
Gly Phe Leu Tyr Arg Arg Leu Lys Thr Gln Glu Lys Arg Glu Met Gln
      65      70      75      80
Lys Glu Ile Leu Ser Val Leu Gly Leu Pro His Arg Pro Arg Pro Leu
      85      90      95
His Gly Leu Gln Gln Pro Gln Pro Pro Ala Leu Arg Gln Gln Glu Glu
      100      105      110
Gln Gln Gln Gln Gln Leu Pro Arg Gly Glu Pro Pro Pro Gly Arg
      115      120      125
Leu Lys Ser Ala Pro Leu Phe Met Leu Asp Leu Tyr Asn Ala Leu Ser
      130      135      140
Ala Asp Asn Asp Glu Asp Gly Ala Ser Glu Gly Glu Arg Gln Gln Ser
      145      150      155      160
Trp Pro His Glu Ala Ala Ser Ser Ser Gln Arg Arg Gln Pro Pro Pro
      165      170      175
Gly Ala Ala His Pro Leu Asn Arg Lys Ser Leu Leu Ala Pro Gly Ser
      180      185      190
Gly Ser Gly Gly Ala Ser Pro Leu Thr Ser Ala Gln Asp Ser Ala Phe
      195      200      205
Leu Asn Asp Ala Asp Met Val Met Ser Phe Val Asn Leu Val Glu Tyr
      210      215      220
Asp Lys Glu Phe Ser Pro Arg Gln Arg His His Lys Glu Phe Lys Phe
      225      230      235      240
Asn Leu Ser Gln Ile Pro Glu Gly Glu Val Val Thr Ala Ala Glu Phe
      245      250      255
Arg Ile Tyr Lys Asp Cys Val Met Gly Ser Phe Lys Asn Gln Thr Phe
      260      265      270
Leu Ile Ser Ile Tyr Gln Val Leu Gln Glu His Gln His Arg Asp Ser
      275      280      285
Asp Leu Phe Leu Leu Asp Thr Arg Val Val Trp Ala Ser Lys Glu Gly
      290      295      300
Trp Leu Glu Phe Asp Ile Thr Ala Thr Ser Asn Leu Trp Val Val Thr
      305      310      315      320
Pro Gln His Asn Met Gly Leu Gln Leu Ser Val Val Thr Arg Asp Gly
      325      330      335
Val His Val His Pro Arg Ala Ala Gly Leu Val Gly Arg Asp Gly Pro
      340      345      350
Tyr Asp Lys Gln Pro Phe Met Val Ala Phe Phe Lys Val Ser Glu Val
      355      360      365
His Val Arg Thr Thr Arg Ser Ala Ser Ser Arg Arg Arg Gln Gln Ser
      370      375      380
Arg Asn Arg Ser Thr Gln Ser Gln Asp Val Ala Arg Val Ser Ser Ala
      385      390      395      400
Ser Asp Tyr Asn Ser Ser Glu Leu Lys Thr Ala Cys Arg Lys His Glu
      405      410      415
Leu Tyr Val Ser Phe Gln Asp Leu Gly Trp Gln Asp Trp Ile Ile Ala
      420      425      430
Pro Lys Gly Tyr Ala Ala Asn Tyr Cys Asp Gly Glu Cys Ser Phe Pro
      435      440      445
Leu Asn Ala His Met Asn Ala Thr Asn His Ala Ile Val Gln Thr Leu
      450      455      460
Val His Leu Met Asn Pro Glu Tyr Val Pro Lys Pro Cys Cys Ala Pro

```

465 470 475 480
 Thr Lys Leu Asn Ala Ile Ser Val Leu Tyr Phe Asp Asp Asn Ser Asn
 485 490 495
 Val Ile Leu Lys Lys Tyr Arg Asn Met Val Val Arg Ala Cys Gly Cys
 500 505 510
 His *
 513

<210> 817
 <211> 312
 <212> PRT
 <213> Homo sapiens

<400> 817
 Met Gly Cys Arg Leu Leu Cys Cys Ala Val Leu Cys Leu Leu Gly Ala
 1 5 10 15
 Val Pro Met Glu Thr Gly Val Thr Gln Thr Pro Arg His Leu Val Met
 20 25 30
 Gly Met Thr Asn Lys Lys Ser Leu Lys Cys Glu Gln His Leu Gly His
 35 40 45
 Asn Ala Met Tyr Trp Tyr Lys Gln Ser Ala Lys Lys Pro Leu Glu Leu
 50 55 60
 Met Phe Val Tyr Asn Phe Lys Glu Gln Thr Glu Asn Asn Ser Val Pro
 65 70 75 80
 Ser Arg Phe Ser Pro Glu Cys Pro Asn Ser Ser His Leu Phe Leu His
 85 90 95
 Leu His Thr Leu Gln Pro Glu Asp Ser Ala Leu Tyr Leu Cys Ala Ser
 100 105 110
 Ser Gln Val Gly Gly Tyr Asn Glu Gln Phe Phe Gly Pro Gly Thr Arg
 115 120 125
 Leu Thr Val Leu Glu Asp Leu Lys Asn Val Phe Pro Pro Glu Val Ala
 130 135 140
 Val Phe Glu Pro Ser Glu Ala Glu Ile Ser His Thr Gln Lys Ala Thr
 145 150 155 160
 Leu Val Cys Leu Ala Thr Gly Phe Tyr Pro Asp His Val Glu Leu Ser
 165 170 175
 Trp Trp Val Asn Gly Lys Glu Val His Ser Gly Val Ser Thr Asp Pro
 180 185 190
 Gln Pro Leu Lys Glu Gln Pro Ala Leu Asn Asp Ser Arg Tyr Cys Leu
 195 200 205
 Ser Ser Arg Leu Arg Val Ser Ala Thr Phe Trp Gln Asn Pro Arg Asn
 210 215 220
 His Phe Arg Cys Gln Val Gln Phe Tyr Gly Leu Ser Glu Asn Asp Glu
 225 230 235 240
 Trp Thr Gln Asp Arg Ala Lys Pro Val Thr Gln Ile Val Ser Ala Glu
 245 250 255
 Ala Trp Gly Arg Ala Asp Cys Gly Phe Thr Ser Glu Ser Tyr Gln Gln
 260 265 270
 Gly Val Leu Ser Ala Thr Ile Leu Tyr Glu Ile Leu Leu Gly Lys Ala
 275 280 285
 Thr Leu Tyr Ala Val Leu Val Ser Ala Leu Val Leu Met Ala Met Val
 290 295 300
 Lys Arg Lys Asp Ser Arg Gly *
 305 310 311

<210> 818
 <211> 106
 <212> PRT
 <213> Homo sapiens

<400> 818
 Met Ala Leu Leu Cys Ile Cys Leu Cys Leu Ile Phe Phe Leu Ile Val
 1 5 10 15
 Lys Ala Arg Arg Lys Gln Ala Ala Gly Arg Pro Glu Lys Met Asp Asp
 20 25 30
 Glu Asp Pro Ile Met Gly Thr Ile Thr Ser Gly Ser Arg Lys Lys Pro
 35 40 45
 Trp Pro Asp Ser Pro Gly Asp Gln Ala Ser Pro Pro Gly Asp Ala Pro
 50 55 60
 Pro Leu Glu Glu Gln Lys Glu Leu His Tyr Ala Ser Leu Ser Phe Ser
 65 70 75 80
 Glu Met Lys Ser Arg Glu Pro Lys Asp Gln Glu Ala Pro Ser Thr Thr
 85 90 95
 Glu Tyr Ser Glu Ile Lys Thr Ser Lys *
 100 105

<210> 819
 <211> 75
 <212> PRT
 <213> Homo sapiens

<400> 819
 Met Val Val Gly Ile Val Ala Ala Ala Ala Leu Cys Ile Leu Ile Leu
 1 5 10 15
 Leu Tyr Ala Met Tyr Lys Tyr Arg Asn Arg Asp Glu Gly Ser Tyr Gln
 20 25 30
 Val Asp Glu Thr Arg Asn Tyr Ile Ser Asn Ser Ala Gln Ser Asn Gly
 35 40 45
 Thr Leu Met Lys Glu Lys Gln Gln Ser Ser Lys Ser Gly His Lys Lys
 50 55 60
 Gln Lys Asn Lys Asp Arg Glu Tyr Tyr Val *
 65 70 74

<210> 820
 <211> 75
 <212> PRT
 <213> Homo sapiens

<400> 820
 Met Val Val Gly Ile Val Ala Ala Ala Ala Leu Cys Ile Leu Ile Leu
 1 5 10 15
 Leu Tyr Ala Met Tyr Lys Tyr Arg Asn Arg Asp Glu Gly Ser Tyr Gln
 20 25 30
 Val Asp Glu Thr Arg Asn Tyr Ile Ser Asn Ser Ala Gln Ser Asn Gly
 35 40 45
 Thr Leu Met Lys Glu Lys Gln Gln Ser Ser Lys Ser Gly His Lys Lys
 50 55 60
 Gln Lys Asn Lys Asp Arg Glu Tyr Tyr Val *
 65 70 74

<210> 821
 <211> 48
 <212> PRT
 <213> Homo sapiens

<400> 821

```

Met Gly Ser Leu Met Pro Leu Arg Pro Leu Ala Leu His Thr Ala Leu
 1          5          10          15
Gly Ala Ala Leu Asn Phe Ser Leu Pro Cys Glu Trp Ser Thr Leu Pro
      20          25          30
Ser Ala Ser Glu Ala Gly Arg Leu Trp Gly Pro Pro Ser Phe Gln *
      35          40          45          47

```

<210> 822

<211> 459

<212> PRT

<213> Homo sapiens

<400> 822

```

Met Ala Trp Ala Ser Arg Leu Gly Leu Leu Leu Ala Leu Leu Leu Pro
 1          5          10          15
Val Val Gly Ala Ser Thr Pro Gly Thr Val Val Arg Leu Asn Lys Ala
      20          25          30
Ala Leu Ser Tyr Val Ser Glu Ile Gly Lys Ala Pro Leu Gln Arg Ala
      35          40          45
Leu Gln Val Thr Val Pro His Phe Leu Asp Trp Ser Gly Glu Ala Leu
      50          55          60
Gln Pro Thr Arg Ile Arg Ile Leu Asn Val His Val Pro Arg Leu His
      65          70          75          80
Leu Lys Phe Ile Ala Gly Phe Gly Val Arg Leu Leu Ala Ala Ala Asn
      85          90          95
Phe Thr Phe Lys Val Phe Arg Ala Pro Glu Pro Leu Glu Leu Thr Leu
      100          105          110
Pro Val Glu Leu Leu Ala Asp Thr Arg Val Thr Gln Ser Ser Ile Arg
      115          120          125
Thr Pro Val Val Ser Ile Ser Ala Cys Ser Leu Phe Ser Gly His Ala
      130          135          140
Asn Glu Phe Asp Gly Ser Asn Ser Thr Ser His Ala Leu Leu Val Leu
      145          150          155          160
Val Gln Lys His Ile Lys Ala Val Leu Ser Asn Lys Leu Cys Leu Ser
      165          170          175
Ile Ser Asn Leu Val Gln Gly Val Asn Val His Leu Gly Thr Leu Ile
      180          185          190
Gly Leu Asn Pro Val Gly Pro Glu Ser Gln Ile Arg Tyr Ser Met Val
      195          200          205
Ser Val Pro Thr Val Thr Ser Asp Tyr Ile Ser Leu Glu Val Asn Ala
      210          215          220
Val Leu Phe Leu Leu Gly Lys Pro Ile Ile Leu Pro Thr Asp Ala Thr
      225          230          235          240
Pro Phe Val Leu Pro Arg His Val Gly Thr Glu Gly Ser Met Ala Thr
      245          250          255
Val Gly Leu Ser Gln Gln Leu Phe Asp Ser Ala Leu Leu Leu Leu Gln
      260          265          270
Lys Ala Gly Ala Leu Asn Leu Asp Ile Thr Gly Gln Leu Arg Ser Asp
      275          280          285
Asp Asn Leu Leu Asn Thr Ser Ala Leu Gly Arg Leu Ile Pro Glu Val
      290          295          300
Ala Arg Gln Phe Pro Glu Pro Met Pro Val Val Leu Lys Val Arg Leu
      305          310          315          320
Gly Ala Thr Pro Val Ala Met Leu His Thr Asn Asn Ala Thr Leu Arg
      325          330          335
Leu Gln Pro Phe Val Glu Val Leu Ala Thr Ala Ser Asn Ser Ala Phe
      340          345          350
Gln Ser Leu Phe Ser Leu Asp Val Val Val Asn Leu Arg Leu Gln Leu

```



```

          355          360          365
Ser Val Ser Lys Val Lys Leu Gln Gly Thr Thr Ser Val Leu Gly Asp
          370          375          380
Val Gln Leu Thr Val Ala Ser Ser Asn Val Gly Phe Ile Asp Thr Asp
          385          390          395          400
Gln Val Arg Thr Leu Met Gly Thr Val Phe Glu Lys Pro Leu Leu Asp
          405          410          415
His Leu Asn Ala Leu Leu Ala Met Gly Ile Ala Leu Pro Gly Val Val
          420          425          430
Asn Leu His Tyr Val Ala Pro Glu Ile Phe Val Tyr Glu Gly Tyr Val
          435          440          445
Val Ile Ser Ser Gly Leu Phe Tyr Gln Ser *
          450          455          458

```

<210> 823
 <211> 67
 <212> PRT
 <213> Homo sapiens

```

          <400> 823
Met Lys Leu Val Leu Leu Arg Lys Thr Ser Leu Ser Val Phe Thr Thr
   1          5          10          15
Leu Phe Ser Val Ser Ser Ser Gln Tyr Pro Val Leu Ser Thr Ser Ile
          20          25          30
Cys Asn Thr Pro Val Phe Ser Thr Leu Phe Leu Glu Ala Cys Ser Val
          35          40          45
Asn Pro Leu Pro Ser Thr Val Phe Leu Val Leu Leu Tyr Ser Val Ala
          50          55          60
Cys Leu *
          65          66

```

<210> 824
 <211> 169
 <212> PRT
 <213> Homo sapiens

```

          <400> 824
Met Ile Phe Val Leu Gly Gln Ala Glu Gly Ile Leu Ile Met Leu Ala
   1          5          10          15
Met Thr Ala Leu Thr Val Arg Arg Ser Glu Pro Ser Leu Ser Thr Cys
          20          25          30
Gln Gln Gly Glu Asp Pro Leu Asp Trp Thr Val Ser Leu Leu Met
          35          40          45
Ala Gly Leu Cys Thr Phe Phe Ser Cys Ile Leu Ala Val Phe Phe His
          50          55          60
Thr Pro Tyr Arg Arg Leu Gln Ala Glu Ser Gly Glu Pro Pro Ser Thr
          65          70          75          80
Arg Asn Ala Val Gly Ser Gln Thr Gln Gly Arg Val Trp Thr Glu Gly
          85          90          95
Glu Ala Arg Lys Gly Leu Gly Ser Trp Gly Pro Ala Arg Arg Ile Pro
          100          105          110
Glu Leu His Gly Glu Gly Gly Ala Ser Leu Arg Gly Pro Gln Glu Gly
          115          120          125
His Gly Ser Pro His Pro Ala Cys His Arg Ala Thr Pro Arg Ala Gln
          130          135          140
Gly Pro Ala Ala Thr Asp Ala Pro Phe Pro Pro Gly Gln Thr Arg Arg
          145          150          155          160
Gln Gly Pro Ser Val Gln Val Tyr *

```

165

168

<210> 825
 <211> 64
 <212> PRT
 <213> Homo sapiens

<400> 825
 Met Leu Leu Ala Lys Arg Tyr Ala Lys Tyr Phe Ile Tyr Phe Ile Phe
 1 5 10 15
 Phe Asn Pro Val Leu Ile Pro Ile Leu Gln Arg Arg Ile Leu Arg Leu
 20 25 30
 Gly Glu Ile His Ile Ala Gly Gln Cys Arg Ala Gly Ser Leu Gln Ser
 35 40 45
 Leu Pro Leu Pro Ala Asn Leu His Ser Ile Leu Asp Ile Leu Ala *
 50 55 60 63

<210> 826
 <211> 47
 <212> PRT
 <213> Homo sapiens

<400> 826
 Met Leu Leu Cys Leu His Leu Ile Ile Ile Cys Leu Val Phe Cys Ile
 1 5 10 15
 Ile Ser Ala Ile Pro Trp Val Leu Asn Gln Cys Leu Ile Phe Arg Leu
 20 25 30
 Tyr Phe Leu Cys Gln Lys Lys Leu Ala Met Ser Leu Glu Asn *
 35 40 45 46

<210> 827
 <211> 59
 <212> PRT
 <213> Homo sapiens

<400> 827
 Met Leu Ile Gly Ser Gly Tyr Leu Cys Phe Cys Ala Leu Gln Trp Thr
 1 5 10 15
 Glu Leu Gly Asn Val Cys Val Cys Ala His Ile Cys Arg Cys Thr His
 20 25 30
 Met Gln Val Ser Gly Ile Thr Ser Pro Val His Val His Ile His Arg
 35 40 45
 Val Leu Ser Cys Leu Ile His Phe Thr Ser *
 50 55 58

<210> 828
 <211> 72
 <212> PRT
 <213> Homo sapiens

<400> 828
 Met His Leu Leu Val Ser His Ala Phe Leu Pro Phe Pro Leu His Gly

```

      1           5           10           15
Tyr Ser Gly Arg Gln Arg Gly Ala Lys Gln Trp Arg Cys His Pro Ala
      20           25           30
Arg Ala Ser Arg Glu Arg Pro Ser Glu Asp Asn Leu Ser Pro Ala Val
      35           40           45
Lys Glu Glu Ser Gly Phe Val Val Ser Glu His Leu Ala Ala Leu His
      50           55           60
Arg Lys Leu Arg Gly Cys His *
      65           70  71

```

<210> 829
 <211> 312
 <212> PRT
 <213> Homo sapiens

```

      <400> 829
Met Leu Leu Leu Leu Leu Leu Leu Gly Leu Ala Gly Ser Gly Leu Gly
      1           5           10           15
Ala Val Val Ser Gln His Pro Ser Trp Val Ile Cys Lys Ser Gly Thr
      20           25           30
Ser Val Lys Ile Glu Cys Arg Ser Leu Asp Phe Gln Ala Thr Thr Met
      35           40           45
Phe Trp Tyr Arg Gln Phe Pro Lys Gln Ser Leu Met Leu Met Ala Thr
      50           55           60
Ser Asn Glu Gly Ser Lys Ala Thr Tyr Glu Gln Gly Val Glu Lys Asp
      65           70           75           80
Lys Phe Leu Ile Asn His Ala Ser Leu Thr Leu Ser Thr Leu Thr Val
      85           90           95
Thr Ser Ala His Pro Glu Asp Ser Ser Phe Tyr Ile Cys Ser Ala Gly
      100          105          110
Ala Asp Ser Gly Thr Gln Glu Thr Gln Tyr Phe Gly Pro Gly Thr Arg
      115          120          125
Leu Thr Val Leu Glu Asp Leu Lys Asn Val Phe Pro Pro Glu Val Ala
      130          135          140
Val Phe Glu Pro Ser Glu Ala Glu Ile Ser His Thr Gln Lys Ala Thr
      145          150          155          160
Leu Val Cys Leu Ala Thr Gly Phe Tyr Pro Asp His Val Glu Leu Ser
      165          170          175
Trp Trp Val Asn Gly Lys Glu Val His Ser Gly Val Ser Thr Asp Pro
      180          185          190
Gln Pro Leu Lys Glu Gln Pro Ala Leu Asn Asp Ser Arg Tyr Cys Leu
      195          200          205
Ser Ser Arg Leu Arg Val Ser Ala Thr Phe Trp Gln Asn Pro Arg Asn
      210          215          220
His Phe Arg Cys Gln Val Gln Phe Tyr Gly Leu Ser Glu Asn Asp Glu
      225          230          235          240
Trp Thr Gln Asp Arg Ala Lys Pro Val Thr Gln Ile Val Ser Ala Glu
      245          250          255
Ala Trp Gly Arg Ala Asp Cys Gly Phe Thr Ser Glu Ser Tyr Gln Gln
      260          265          270
Gly Val Leu Ser Ala Thr Ile Leu Tyr Glu Ile Leu Leu Gly Lys Ala
      275          280          285
Thr Leu Tyr Ala Val Leu Val Ser Ala Leu Val Leu Met Ala Met Val
      290          295          300
Lys Arg Lys Asp Ser Arg Gly *
      305          310  311

```

<210> 830
 <211> 53

<212> PRT

<213> Homo sapiens

<400> 830

```

Met Ser Val Gly Leu His Leu Gly Phe Leu Ala Trp Phe Leu Pro Phe
 1           5           10           15
Leu Ile Pro Thr Ser Pro Leu Pro Leu Leu Phe Gln Leu Gly Ala Leu
           20           25           30
Pro Asn Glu Ser Leu Ala Leu Tyr Ala Trp Leu Arg Asp Cys Phe Trp
           35           40           45
Glu Asn Ile Thr *
      50      52

```

<210> 831

<211> 67

<212> PRT

<213> Homo sapiens

<400> 831

```

Met Ser Ser Pro Cys Phe Gln Cys Phe His Leu Cys Cys Thr Ile Lys
 1           5           10           15
Val Trp Pro Leu Cys His His Leu Gln Lys Ala Phe Pro Asp Phe Ser
           20           25           30
Ile His Val Phe Ser Glu Ser Asp Leu Ser Ser Phe Cys Glu Val Gln
           35           40           45
Leu Leu Lys Ile Cys Leu Gln Lys Tyr Phe Leu Gly Ser Leu Met His
           50           55           60
Cys Ser *
      65      66

```

<210> 832

<211> 64

<212> PRT

<213> Homo sapiens

<400> 832

```

Met Ile Lys Leu Cys His Gln Leu Tyr Asn Val Tyr Val Cys Phe Phe
 1           5           10           15
His Leu Ile Val Leu Gly Asp Ile Ala Ile Asp Tyr Ile Ile Val Pro
           20           25           30
Asn Ile Ser Tyr Leu Ser Ile Ser Ile Pro Phe Val Val Thr Asn Ile
           35           40           45
Arg Gly Arg Asp Ile Phe His Pro Cys Asn Val Ala Leu Val Met *
           50           55           60           63

```

<210> 833

<211> 47

<212> PRT

<213> Homo sapiens

<400> 833

```

Met Phe Tyr Glu Asn Lys Arg Arg Glu Tyr Leu Gln Asp Met Leu Leu
 1           5           10           15
Ser Tyr Arg Leu Leu Val Ala Ile Leu Val Leu Leu Lys Lys Leu Thr

```

20 25 30
 Glu Leu Asn Thr Ile Thr Leu Ile Cys Lys Ser Ile Ile Phe *
 35 40 45 46

<210> 834
 <211> 52
 <212> PRT
 <213> Homo sapiens

<400> 834
 Met Asn Ile Val Phe Val Ile Leu Leu Phe Lys Asp Met Gln Val Leu
 1 5 10 15
 Glu Val Phe Val Leu Leu Asn Val Leu Thr Thr Leu Thr Ile Ile Ala
 20 25 30
 Ala Gly Ile Leu Cys Thr Ser Phe Cys Cys Lys Pro Phe Ile Tyr Ile
 35 40 45
 Asn Pro Leu *
 50 51

<210> 835
 <211> 61
 <212> PRT
 <213> Homo sapiens

<400> 835
 Met Ile Arg Phe Ala Leu Pro Trp Phe Ser Gln Ile Trp Leu Ser Lys
 1 5 10 15
 Gln Thr Trp Thr Arg Leu Thr His Leu Ala Phe Leu Leu Gln Glu Cys
 20 25 30
 Asn Ser Met Phe Tyr Pro Lys Val Ser Arg Thr Thr Val Phe Gly Cys
 35 40 45
 Leu Phe Asn Pro Leu Ser Ser Arg Val Cys Phe Glu *
 50 55 60

<210> 836
 <211> 89
 <212> PRT
 <213> Homo sapiens

<400> 836
 Met Thr Asn Phe Phe His Leu Leu Leu Pro Leu Leu Pro Ser Leu Phe
 1 5 10 15
 Ser Pro Ser Ser Lys Thr His Ser Phe Asn Ile His Lys Ile Ile Ile
 20 25 30
 Ile Ile Leu Phe Phe Asn Ser Ile Phe Leu Tyr Pro Arg Asp Tyr Leu
 35 40 45
 Lys Ile Arg Asn Trp Leu Gln Ser Asn Thr Leu Glu Arg Glu Ile Glu
 50 55 60
 Trp Ile Thr Ser Ile Arg Cys Leu Cys Asn Ser Gly Thr Thr Phe Ile
 65 70 75 80
 Phe Pro Leu Thr Thr Lys Ser Thr *
 85 88

<210> 837
 <211> 46
 <212> PRT
 <213> Homo sapiens

<400> 837
 Met Leu Tyr Leu Leu Leu Phe Pro Gly Val Ser Tyr Leu Arg Ser Leu
 1 5 10 15
 Phe Leu Gly Arg Pro Ile Gly Pro Gly Ile Thr Ser Asp Phe Thr Leu
 20 25 30
 Ile Leu Phe Ser Asn Leu Leu Asp Ser Trp Pro Leu Ser *
 35 40 45

<210> 838
 <211> 57
 <212> PRT
 <213> Homo sapiens

<400> 838
 Met Pro Cys Ser Val Pro Glu Thr Leu Phe Ser Leu Leu Trp Leu Ala
 1 5 10 15
 Pro Ser His His Ser Gly Phe Ser Ser Asn Glu Ala Ser Leu Arg Thr
 20 25 30
 Asp Leu Leu Phe Ala Thr Ala Ile Leu Tyr Ser Leu Trp His Pro Pro
 35 40 45
 Tyr Tyr Phe Leu Tyr Asn Thr Ser *
 50 55 56

<210> 839
 <211> 56
 <212> PRT
 <213> Homo sapiens

<400> 839
 Met Leu Phe Thr Ser Phe Val Tyr Gly Leu Ile Phe Ile Leu Phe Asp
 1 5 10 15
 Phe Tyr Phe Leu Ser Phe Val Glu Arg Asp Val Lys Ile Phe Asn Cys
 20 25 30
 Asn Gly Glu Ile Val Leu Phe Pro Phe Asn Ser Val His Phe Cys Leu
 35 40 45
 Ile Cys Leu Tyr Ile His Ile *
 50 55

<210> 840
 <211> 49
 <212> PRT
 <213> Homo sapiens

<400> 840
 Met Ile Leu Asn Leu Ser Ser Leu Thr Leu Val Phe Ala Trp Asn Tyr
 1 5 10 15
 Pro Leu His Leu Met Ile Ser Leu Asn Val Ser Cys Ser Cys Tyr Ser
 20 25 30
 Asp Asp Ile Ser Gly Ile Tyr Arg Ser Val Leu Arg Gln Lys Leu Gly

35 40 45 48
*

<210> 841
<211> 72
<212> PRT
<213> Homo sapiens

<400> 841
Met Cys Leu Ile Leu Val Ile Trp Lys Ile His Tyr Ala Glu Leu Ile
1 5 10 15
Met Leu Asn Lys Arg Val Val Asn Lys Cys Arg Ser Cys Leu Ile Gln
20 25 30
Lys Cys Leu Ser Thr Cys His Ser Thr Val Ile Val Leu Tyr Gln Cys
35 40 45
Arg Glu Glu Glu Ala Val Met Leu Ile Lys Leu Asn Phe Lys Met Lys
50 55 60
Ile Gln Arg Thr Ile Cys Ile *
65 70 71

<210> 842
<211> 80
<212> PRT
<213> Homo sapiens

<400> 842
Met Asn Leu Lys Arg Leu Leu Leu Phe Leu Ala Lys Met Phe Ser Ala
1 5 10 15
Ile Phe Ser Leu Pro Thr His Pro Ser His Phe Pro Ile Ser Ile Tyr
20 25 30
Asp Asn Ile Gly His Trp Pro Gln Ser Pro Lys Val Arg Arg Lys Glu
35 40 45
Gly Asn Glu Tyr Leu Leu Asn Pro Asn Met Cys Gln Thr Leu Asp Leu
50 55 60
Thr Leu Leu Gly Ile Gly Asp Tyr Leu Thr Ser Ile Thr Ser Pro *
65 70 75 79

<210> 843
<211> 91
<212> PRT
<213> Homo sapiens

<400> 843
Met Ala Pro Leu Pro Ser Leu Thr Leu Arg Pro Trp Cys Val Leu Met
1 5 10 15
Leu Leu Asp Leu Trp Ala Ala Phe Gly Thr Ile Thr Pro Ser Leu Lys
20 25 30
His Phe His His Leu Pro Ser Gly Thr Gln His Ser Leu Val Phe Val
35 40 45
Leu Ser Leu Thr Leu His Ser Gln Leu Ser Leu Leu Met Gly Thr Ser
50 55 60
Ala Val Cys Leu Ser Ala Cys Phe Ser Ser Leu Ser Thr Phe Pro Gly
65 70 75 80
Trp Leu Leu Ile Ile Cys Thr Leu Met Ile *

85

90

<210> 844
 <211> 47
 <212> PRT
 <213> Homo sapiens

<400> 844
 Met Phe Leu Leu Asp Leu Cys Leu Gly Ser Leu Ser Val Phe Ile Asp
 1 5 10 15
 Thr His Pro Cys Met His Gly Gly Phe Lys Cys Ser Gln Asp Trp Cys
 20 25 30
 Ser Pro Ala Lys Leu Leu Leu Ser Ala Phe Thr Lys Thr Arg *
 35 40 45 46

<210> 845
 <211> 59
 <212> PRT
 <213> Homo sapiens

<400> 845
 Met Leu Ser Leu Val Lys Leu Leu Leu Leu Cys Ile Ile His Asp His
 1 5 10 15
 Ser Ile Asn Phe Cys Ile Ala Ile Gln Val Gly Leu Leu Pro Ser Ala
 20 25 30
 Tyr Arg Val Pro Gly Ile Val Leu Ser Leu Glu Asn Thr Ala Leu Ile
 35 40 45
 Arg Gln Thr Pro Cys Ser Asn Arg Ala Asn *
 50 55 58

<210> 846
 <211> 236
 <212> PRT
 <213> Homo sapiens

<400> 846
 Met Arg Pro Leu Ala Gly Gly Leu Leu Lys Val Val Phe Val Val Phe
 1 5 10 15
 Ala Ser Leu Cys Ala Trp Tyr Ser Gly Tyr Leu Leu Ala Glu Leu Ile
 20 25 30
 Pro Asp Ala Pro Leu Ser Ser Ala Ala Tyr Ser Ile Arg Ser Ile Gly
 35 40 45
 Glu Arg Pro Val Leu Lys Ala Pro Val Pro Lys Arg Gln Lys Cys Asp
 50 55 60
 His Trp Thr Pro Cys Pro Ser Asp Thr Tyr Ala Tyr Arg Leu Leu Ser
 65 70 75 80
 Gly Gly Gly Arg Ser Lys Tyr Ala Lys Ile Cys Phe Glu Asp Asn Leu
 85 90 95
 Leu Met Gly Glu Gln Leu Gly Asn Val Ala Arg Gly Ile Asn Ile Ala
 100 105 110
 Ile Val Asn Tyr Val Thr Gly Asn Val Thr Ala Thr Arg Cys Phe Asp
 115 120 125
 Met Tyr Glu Gly Asp Asn Ser Gly Pro Met Thr Lys Phe Ile Gln Ser
 130 135 140
 Ala Ala Pro Lys Ser Leu Leu Phe Met Val Thr Tyr Asp Asp Gly Ser


```

145          150          155          160
Thr Arg Leu Asn Asn Asp Ala Lys Asn Ala Ile Glu Ala Leu Gly Ser
          165          170          175
Lys Glu Ile Arg Asn Met Lys Phe Arg Ser Ser Trp Val Phe Ile Ala
          180          185          190
Ala Lys Gly Leu Glu Leu Pro Ser Glu Ile Gln Arg Glu Lys Ile Asn
          195          200          205
His Ser Asp Ala Lys Asn Asn Arg Tyr Ser Gly Trp Pro Ala Glu Ile
          210          215          220
Gln Ile Glu Gly Cys Ile Pro Lys Glu Arg Ser *
225          230          235

```

```

<210> 847
<211> 66
<212> PRT
<213> Homo sapiens

```

```

<400> 847
Met Leu Pro Phe Cys His Leu Trp Val Pro Val Thr Leu Val Ala Ala
 1          5          10          15
Gly Ala Ala Gln Pro Ala Ala Ser Met Val Met Phe Pro His Leu Pro
          20          25          30
Ala Leu His His His Cys Pro His Ser His Arg Thr Ser Gln Tyr Met
          35          40          45
Pro Ala Ser Asp Gly Pro Gln Ala Tyr Pro Asp Tyr Ala Asp Gln Ser
 50          55          60
Thr *
65

```

```

<210> 848
<211> 69
<212> PRT
<213> Homo sapiens

```

```

<400> 848
Met Asn Pro Cys Phe Cys Gly Phe Leu Val Leu Leu Ser Cys Cys Leu
 1          5          10          15
Ser Leu Leu Asp Ser Gln Leu His Asn Leu Ile Ala Leu Gln Ile Thr
          20          25          30
Cys Phe Lys Asp Val Glu Ile Pro Asn Phe Phe Cys Asp Pro Ser Gln
          35          40          45
Leu Pro His His Ala Cys Cys Asp Thr Phe Thr Asn Asn Ile Val Met
 50          55          60
Tyr Phe Pro Ala Ala
65          69

```

```

<210> 849
<211> 407
<212> PRT
<213> Homo sapiens

```

```

<400> 849
Met Leu Leu Leu Leu Leu Leu Pro Leu Leu Trp Gly Thr Lys Gly
 1          5          10          15
Met Glu Gly Asp Arg Gln Tyr Gly Asp Gly Tyr Leu Leu Gln Val Gln

```

20 25 30
 Glu Leu Val Thr Val Gln Glu Gly Leu Cys Val His Val Pro Cys Ser
 35 40 45
 Phe Ser Tyr Pro Gln Asp Gly Trp Thr Asp Ser Asp Pro Val His Gly
 50 55 60
 Tyr Trp Phe Arg Ala Gly Asp Arg Pro Tyr Gln Asp Ala Pro Val Ala
 65 70 75 80
 Thr Asn Asn Pro Asp Arg Glu Val Gln Ala Glu Thr Gln Gly Arg Phe
 85 90 95
 Gln Leu Leu Gly Asp Ile Trp Ser Asn Asp Cys Ser Leu Ser Ile Arg
 100 105 110
 Asp Ala Arg Lys Arg Asp Lys Gly Ser Tyr Phe Phe Arg Leu Glu Arg
 115 120 125
 Gly Ser Met Lys Trp Ser Tyr Lys Ser Gln Leu Asn Tyr Lys Thr Lys
 130 135 140
 Gln Leu Ser Val Phe Val Thr Asp Pro Pro Trp Asn Leu Thr Met Thr
 145 150 155 160
 Val Phe Gln Gly Asp Ala Thr Ala Ser Thr Ala Leu Gly Asn Gly Ser
 165 170 175
 Ser Leu Ser Val Leu Glu Gly Gln Ser Leu Arg Leu Val Cys Ala Val
 180 185 190
 Asn Ser Asn Pro Pro Ala Arg Leu Ser Trp Thr Arg Gly Ser Leu Thr
 195 200 205
 Leu Cys Pro Ser Arg Ser Ser Asn Pro Gly Leu Leu Glu Leu Pro Arg
 210 215 220
 Val His Val Arg Asp Glu Gly Glu Phe Thr Cys Arg Ala Gln Asn Ala
 225 230 235 240
 Gln Gly Ser Gln His Ile Ser Leu Ser Leu Ser Leu Gln Asn Glu Gly
 245 250 255
 Thr Gly Thr Ser Arg Pro Val Ser Gln Val Thr Leu Ala Ala Val Gly
 260 265 270
 Gly Ala Gly Ala Thr Ala Leu Ala Phe Leu Ser Phe Cys Ile Ile Phe
 275 280 285
 Ile Ile Val Arg Ser Cys Arg Lys Lys Ser Ala Arg Pro Ala Ala Gly
 290 295 300
 Val Gly Asp Thr Gly Met Glu Asp Ala Lys Ala Ile Arg Gly Ser Ala
 305 310 315 320
 Ser Gln Gly Pro Leu Thr Glu Ser Trp Lys Asp Gly Asn Pro Leu Lys
 325 330 335
 Lys Pro Pro Pro Ala Val Ala Pro Ser Gly Glu Glu Gly Glu Leu
 340 345 350
 His Tyr Ala Thr Leu Ser Phe His Lys Val Lys Pro Gln Asp Pro Gln
 355 360 365
 Gly Gln Glu Ala Thr Asp Ser Glu Tyr Ser Glu Ile Lys Ile His Lys
 370 375 380
 Arg Glu Thr Ala Glu Thr Gln Ala Cys Leu Arg Asn His Asn Pro Ser
 385 390 395 400
 Ser Lys Glu Val Arg Gly *
 405 406

<210> 850

<211> 73

<212> PRT

<213> Homo sapiens

<400> 850

Met Tyr Tyr Thr Leu Cys Asn Phe Val Phe Phe Thr Leu His Met Ile
 1 5 10 15
 Leu Phe Pro Lys Ser Leu Asn Ile Leu Leu Ser Asn Gln Ile Arg Ser
 20 25 30
 Ala Ile Val His Leu Lys Gln Arg Thr Ser Cys Ile Lys Asn Gln Pro

```

      35              40              45
Glu Pro Tyr Gln Arg Ala Asp Ala Met Asn Thr Asn His Ser Leu Val
      50              55              60
Ala Val Pro Tyr Val Asn Leu Ile *
      65              70              72

```

<210> 851
 <211> 74
 <212> PRT
 <213> Homo sapiens

```

      <400> 851
Met Phe Trp Met Val Lys Ile Leu Thr Pro Lys Ala Ser Thr Phe Gln
  1              5              10              15
Val Thr Thr Ser Val Ser Val Pro Leu Thr Ser Ala Thr Gly Ala Ala
      20              25              30
Cys Ser Gly Ser Cys Phe His Ser Thr Gly Cys Ala Gly Arg Pro Gln
      35              40              45
Thr His Ala Gly Ala Pro Cys Ala Ser Glu Gln Asn Ser Arg Asn Glu
      50              55              60
Val Met Gln Thr Ser Thr Asn Glu Met *
      65              70              73

```

<210> 852
 <211> 93
 <212> PRT
 <213> Homo sapiens

```

      <400> 852
Met His Cys Arg Gln Leu Lys Glu Val Leu Gln Leu Pro Leu Thr Cys
  1              5              10              15
Ser Ser Cys Cys Val Cys Thr Met Thr Val Ala Phe Pro Ser Val Gln
      20              25              30
Gln Val Trp Met Glu Thr Val Leu Thr Leu Gly Gly Leu Asp Ala Ala
      35              40              45
Gln Asp Glu Ile Gln Ala Val Arg Leu Ile Leu Leu Pro Glu Ser Ser
      50              55              60
Pro Gln Gly Pro His Gly Asn Leu Ala Pro Cys Ser Ala Lys Pro Phe
      65              70              75              80
Phe Leu Pro Gln Val Met Pro Leu Gly Thr Ala Pro *
      85              90              92

```

<210> 853
 <211> 267
 <212> PRT
 <213> Homo sapiens

```

      <400> 853
Met Val Cys Leu Arg Leu Pro Gly Gly Ser Cys Met Ala Val Leu Thr
  1              5              10              15
Val Thr Leu Met Val Leu Ser Ser Pro Leu Ala Leu Ala Gly Asp Thr
      20              25              30
Arg Pro Arg Phe Leu Glu Tyr Ser Thr Ser Glu Cys His Phe Phe Asn
      35              40              45
Gly Thr Glu Arg Val Arg Phe Leu Asp Arg Tyr Phe Tyr Asn Gln Glu

```

```

      50              55              60
Glu Tyr Val Arg Phe Asp Ser Asp Val Gly Glu Phe Arg Ala Val Thr
 65              70              75              80
Glu Leu Gly Arg Pro Asp Glu Glu Tyr Trp Asn Ser Gln Lys Asp Phe
      85              90              95
Leu Glu Asp Arg Arg Ala Ala Val Asp Thr Tyr Cys Arg His Asn Tyr
      100              105              110
Gly Val Val Glu Ser Phe Thr Val Gln Arg Arg Val His Pro Lys Val
      115              120              125
Thr Val Tyr Pro Ser Lys Thr Gln Pro Leu Gln His His Asn Leu Leu
      130              135              140
Val Cys Ser Val Ser Gly Phe Tyr Pro Gly Ser Ile Glu Val Arg Trp
145              150              155              160
Phe Arg Asn Gly Gln Glu Glu Lys Thr Gly Val Val Ser Thr Gly Leu
      165              170              175
Ile His Asn Gly Asp Trp Thr Phe Gln Thr Leu Val Met Leu Glu Thr
      180              185              190
Val Pro Arg Ser Gly Glu Val Tyr Thr Cys Gln Val Glu His Pro Ser
      195              200              205
Val Thr Ser Pro Leu Thr Val Glu Trp Arg Ala Arg Ser Glu Ser Ala
210              215              220
Gln Ser Lys Met Leu Ser Gly Val Gly Gly Phe Val Leu Gly Leu Leu
225              230              235              240
Phe Leu Gly Ala Gly Leu Phe Ile Tyr Phe Arg Asn Gln Lys Gly His
      245              250              255
Ser Gly Leu Gln Pro Arg Gly Phe Leu Ser *
      260              265 266

```

<210> 854
 <211> 327
 <212> PRT
 <213> Homo sapiens

```

      <400> 854
Met Met Ser Pro Ser Gln Ala Ser Leu Leu Phe Leu Asn Val Cys Ile
 1              5              10              15
Phe Ile Cys Gly Glu Val Val Gln Gly Asn Cys Val His His Ser Thr
      20              25              30
Asp Ser Ser Val Val Asn Ile Val Glu Asp Gly Ser Asn Ala Lys Asp
      35              40              45
Glu Ser Lys Ser Asn Asp Thr Val Cys Lys Glu Asp Cys Glu Glu Ser
      50              55              60
Cys Asp Val Lys Thr Lys Ile Thr Arg Glu Glu Lys His Phe Met Cys
      65              70              75              80
Arg Asn Leu Gln Asn Ser Ile Val Ser Tyr Thr Arg Ser Thr Lys Lys
      85              90              95
Leu Leu Arg Asn Met Met Asp Glu Gln Gln Ala Ser Leu Asp Tyr Leu
      100              105              110
Ser Asn Gln Val Asn Glu Leu Met Asn Arg Val Leu Leu Leu Thr Thr
      115              120              125
Glu Val Phe Arg Lys Gln Leu Asp Pro Phe Pro His Arg Pro Val Gln
      130              135              140
Ser His Gly Leu Asp Cys Thr Asp Ile Lys Asp Thr Ile Gly Ser Val
145              150              155              160
Thr Lys Thr Pro Ser Gly Leu Tyr Ile Ile His Pro Glu Gly Ser Ser
      165              170              175
Tyr Pro Phe Glu Val Met Cys Asp Met Asp Tyr Arg Gly Gly Gly Trp
      180              185              190
Thr Val Ile Gln Lys Arg Ile Asp Gly Ile Ile Asp Phe Gln Arg Leu
      195              200              205
Trp Cys Asp Tyr Leu Asp Gly Phe Gly Asp Leu Leu Gly Asp Ala Phe

```

```

      210              215              220
Arg Gly Leu Lys Lys Glu Asp Asn Gln Asn Ala Met Pro Phe Ser Thr
225              230              235              240
Ser Asp Val Asp Asn Asp Gly Cys Arg Pro Ala Cys Leu Val Asn Gly
      245              250              255
Gln Ser Val Lys Ser Cys Ser His Leu His Asn Lys Thr Gly Trp Trp
      260              265              270
Phe Asn Glu Cys Gly Leu Ala Asn Leu Asn Gly Ile His His Phe Ser
      275              280              285
Gly Lys Leu Leu Ala Thr Gly Ile Gln Trp Gly Thr Trp Thr Lys Asn
      290              295              300
Asn Ser Pro Val Lys Ile Lys Ser Val Ser Met Lys Ile Arg Arg Met
305              310              315              320
Tyr Asn Pro Tyr Phe Lys *
      325 326

```

```

<210> 855
<211> 71
<212> PRT
<213> Homo sapiens

```

```

      <400> 855
Met Arg Thr Trp Ser Lys Val Ile Pro Ser Leu Trp Leu Lys Phe Ser
 1              5              10              15
Arg Gly Phe Ile Ile Leu Arg Phe His Phe Leu Met Ile Ile Trp Pro
      20              25              30
Asp Ile Pro Ser Ser Met Tyr Ile Cys Met Ser Phe Ile Thr Ala Phe
      35              40              45
Lys Asn Leu Phe Met Phe Gly Ile Asn Arg Ile Lys Lys Ile Ser Val
      50              55              60
Val Ser Arg Asn Thr Leu *
65              70

```

```

<210> 856
<211> 290
<212> PRT
<213> Homo sapiens

```

```

      <400> 856
Met Gly Leu Cys Val Pro Phe Ala Val Thr Thr Ser Phe Leu Ser Leu
 1              5              10              15
Gly Leu Glu Trp Asp Leu Asn Val Arg Leu His Gly Gln His Leu Val
      20              25              30
Gln Gln Leu Val Leu Arg Thr Val Arg Gly Tyr Leu Glu Thr Pro Gln
      35              40              45
Pro Glu Lys Ala Leu Ala Leu Ser Phe His Gly Trp Ser Gly Thr Gly
      50              55              60
Lys Asn Phe Val Ala Arg Met Leu Val Glu Asn Leu Tyr Arg Asp Gly
65              70              75              80
Leu Met Ser Asp Cys Val Arg Met Phe Ile Ala Thr Phe His Phe Pro
      85              90              95
His Pro Lys Tyr Val Asp Leu Tyr Lys Glu Gln Leu Met Ser Gln Ile
      100              105              110
Arg Glu Thr Gln Gln Leu Cys His Gln Thr Leu Phe Ile Phe Asp Glu
      115              120              125
Ala Glu Lys Leu His Pro Gly Leu Leu Glu Val Leu Gly Pro His Leu
      130              135              140
Glu Arg Arg Ala Pro Glu Gly His Arg Ala Glu Ser Pro Trp Thr Ile

```

```

145          150          155          160
Phe Leu Phe Leu Ser Asn Leu Arg Gly Asp Ile Ile Asn Glu Val Val
          165          170          175
Leu Lys Leu Leu Lys Ala Gly Trp Ser Arg Glu Glu Ile Thr Met Glu
          180          185          190
His Leu Glu Pro His Leu Gln Ala Glu Ile Val Glu Thr Ile Asp Asn
          195          200          205
Gly Phe Gly His Ser Arg Leu Val Lys Glu Asn Leu Ile Asp Tyr Phe
          210          215          220
Ile Pro Phe Leu Pro Leu Glu Tyr Arg His Val Arg Leu Cys Ala Arg
225          230          235          240
Asp Ala Phe Leu Ser Gln Glu Leu Leu Tyr Lys Glu Glu Thr Leu Asp
          245          250          255
Glu Ile Ala Gln Met Met Val Tyr Val Pro Lys Glu Glu Gln Leu Phe
          260          265          270
Ser Ser Gln Gly Cys Lys Ser Ile Ser Gln Arg Ile Asn Tyr Phe Leu
          275          280          285
Ser *
289

```

```

<210> 857
<211> 51
<212> PRT
<213> Homo sapiens

```

```

<400> 857
Met Lys Ser Ser Asn Ile Phe Ser Leu Phe Leu Phe Leu Val Thr Phe
 1          5          10          15
Ile Phe Leu Thr Ser Ile Ala Ser Ile Leu Phe Ser Ser Trp Cys Pro
          20          25          30
Phe Ser Leu Ile Lys Cys Asn Gln Asp Leu Tyr Tyr Ser Gly Asn Gly
          35          40          45
Ala Ser *
50

```

```

<210> 858
<211> 46
<212> PRT
<213> Homo sapiens

```

```

<400> 858
Met Leu Cys Ser Leu Phe His Ile Leu Ile Val Thr Leu Leu Leu Ala
 1          5          10          15
Ile Ser Phe Gly Met Ser Ser Arg Asn Thr Leu Asn Met Val Asn Ser
          20          25          30
Lys Ile Lys Glu His Ser Leu His Arg Lys Leu Glu Ile *
          35          40          45

```

```

<210> 859
<211> 70
<212> PRT
<213> Homo sapiens

```

```

<400> 859
Met Phe Trp Thr Leu Val Gln Gly Met Ser Leu Leu Cys Leu Thr Asp

```

```

      1           5           10           15
Val Phe Gln Ala Leu Pro Ser Ile Cys Ile Ala Asn Ser Glu Ile Tyr
      20           25           30
Tyr Thr Val Leu Thr Leu Met Gln Phe Asn Cys Leu Trp Met Val Leu
      35           40           45
Ser Gly Lys Lys Val Ile Phe Ser Ser Glu Leu Met Val Arg Lys Gly
      50           55           60
Arg Arg Ser Trp Lys *
      65           69

```

<210> 860
 <211> 49
 <212> PRT
 <213> Homo sapiens

```

      <400> 860
Met Tyr Leu Lys Pro Leu Ile Tyr Phe Ser Ile Leu Ile Phe Leu Ser
      1           5           10           15
Gln Arg Ser Lys Leu Ser Leu Pro Tyr Asn Val His Asn Cys Met Asn
      20           25           30
Ile Gly Glu Asp Arg Arg Pro Gln Lys Val Gln Leu Leu Gln Leu Tyr
      35           40           45           48
*

```

<210> 861
 <211> 50
 <212> PRT
 <213> Homo sapiens

```

      <400> 861
Met Leu Pro Leu Ala Leu Ile Val Asp Leu Ile Tyr Pro Trp Val Gln
      1           5           10           15
Val Arg Gly Pro Glu Asp Pro Asn His Gly Thr Thr Glu Arg Lys Arg
      20           25           30
Glu Glu Val Thr Cys Leu Gly Ala Ala Arg Leu Ser Leu Glu Ala Ala
      35           40           45
Arg *
      49

```

<210> 862
 <211> 237
 <212> PRT
 <213> Homo sapiens

```

      <400> 862
Met Thr Ala Glu Phe Leu Ser Leu Leu Cys Leu Gly Leu Cys Leu Gly
      1           5           10           15
Tyr Glu Asp Glu Lys Lys Asn Glu Lys Pro Pro Lys Pro Ser Leu His
      20           25           30
Ala Trp Pro Ser Ser Val Val Glu Ala Glu Ser Asn Val Thr Leu Lys
      35           40           45
Cys Gln Ala His Ser Gln Asn Val Thr Phe Val Leu Arg Lys Val Asn
      50           55           60
Asp Ser Gly Tyr Lys Gln Glu Gln Ser Ser Ala Glu Asn Glu Ala Glu

```

```

65          70          75          80
Phe Pro Phe Thr Asp Leu Lys Pro Lys Asp Ala Gly Arg Tyr Phe Cys
85          90          95
Ala Tyr Lys Thr Thr Ala Ser His Glu Trp Ser Glu Ser Ser Glu His
100        105        110
Leu Gln Leu Val Val Thr Asp Lys His Asp Glu Leu Glu Ala Pro Ser
115        120        125
Met Lys Thr Asp Thr Arg Thr Ile Phe Val Ala Ile Phe Ser Cys Ile
130        135        140
Ser Ile Leu Leu Leu Phe Leu Ser Val Phe Ile Ile Tyr Arg Cys Ser
145        150        155        160
Gln His Ser Ser Ser Ser Glu Glu Ser Thr Lys Arg Thr Ser His Ser
165        170        175
Lys Leu Pro Glu Gln Glu Ala Ala Glu Ala Asp Leu Ser Asn Met Glu
180        185        190
Arg Val Ser Leu Ser Thr Ala Asp Pro Gln Gly Val Thr Tyr Ala Glu
195        200        205
Leu Ser Thr Ser Ala Leu Ser Glu Ala Ala Ser Asp Thr Thr Gln Glu
210        215        220
Pro Pro Gly Ser His Glu Tyr Ala Ala Leu Lys Val *
225        230        235 236

```

<210> 863
 <211> 306
 <212> PRT
 <213> Homo sapiens

```

<400> 863
Met Pro Leu Leu Thr Leu Tyr Leu Leu Leu Phe Trp Leu Ser Gly Tyr
1      5      10      15
Ser Ile Ala Thr Gln Ile Thr Gly Pro Thr Thr Val Asn Gly Leu Glu
20     25     30
Arg Gly Ser Leu Thr Val Gln Cys Val Tyr Arg Ser Gly Trp Glu Thr
35     40     45
Tyr Leu Lys Trp Trp Cys Arg Gly Ala Ile Trp Arg Asp Cys Lys Ile
50     55     60
Leu Val Lys Thr Ser Gly Ser Glu Gln Glu Val Lys Arg Asp Arg Val
65     70     75     80
Ser Ile Lys Asp Asn Gln Lys Asn Arg Thr Phe Thr Val Thr Met Glu
85     90     95
Asp Leu Met Lys Thr Asp Ala Asp Thr Tyr Trp Cys Gly Ile Glu Lys
100    105    110
Thr Gly Asn Asp Leu Gly Val Thr Val Gln Val Thr Ile Asp Pro Ala
115    120    125
Ser Thr Pro Ala Pro Thr Thr Pro Thr Ser Thr Thr Phe Thr Ala Pro
130    135    140
Val Thr Gln Glu Glu Thr Ser Ser Ser Pro Thr Leu Thr Gly His His
145    150    155    160
Leu Asp Asn Arg His Lys Leu Leu Lys Leu Ser Val Leu Leu Pro Leu
165    170    175
Ile Phe Thr Ile Leu Leu Leu Leu Val Ala Ala Ser Leu Leu Ala
180    185    190
Trp Arg Met Met Lys Tyr Gln Gln Lys Ala Ala Gly Met Ser Pro Glu
195    200    205
Gln Val Leu Gln Pro Leu Glu Gly Asp Leu Cys Tyr Ala Asp Leu Thr
210    215    220
Leu Gln Leu Ala Gly Thr Ser Pro Gln Lys Ala Thr Thr Lys Leu Ser
225    230    235    240
Ser Ala Gln Val Asp Gln Val Glu Val Glu Tyr Val Thr Met Ala Ser
245    250    255
Leu Pro Lys Glu Asp Ile Ser Tyr Ala Ser Leu Thr Leu Gly Ala Glu

```


260 265 270
 Asp Gln Glu Pro Thr Tyr Cys Asn Met Gly His Leu Ser Ser His Leu
 275 280 285
 Pro Gly Arg Gly Pro Glu Glu Pro Thr Glu Tyr Ser Thr Ile Ser Arg
 290 295 300
 Pro *
 305

<210> 864
 <211> 124
 <212> PRT
 <213> Homo sapiens

<400> 864
 Met Arg Ile Ser Cys Pro Trp Cys Leu Trp Asn Leu Ser Leu Glu Val
 1 5 10 15
 Gly Gly Thr Val Ala Thr Thr Ala Gln Gln His Ile Ala Glu Val Cys
 20 25 30
 Arg Ser Ser Gln Ala Gly Arg Gly Phe Leu His Cys Leu His Pro Ala
 35 40 45
 Leu Gly Thr Ser Gly Cys His Pro Val Pro Cys Ser Ser Ser Leu Val
 50 55 60
 Gly Phe Gly Trp Arg Gly Tyr Ser Gly Glu Ala Ser Trp Gly Arg Ala
 65 70 75 80
 Ser Ser Arg Pro Ala Ala Pro Thr Pro Pro Met Pro Ala Asn Val Gln
 85 90 95
 Ala Gly Trp Glu Gln Ser Val Arg Leu Leu Cys His Ser Trp Leu Arg
 100 105 110
 Leu Ala Ala Leu His Val Thr His Glu Glu Ser *
 115 120 123

<210> 865
 <211> 46
 <212> PRT
 <213> Homo sapiens

<400> 865
 Met Ser Gln Gln Ser Trp Phe Thr Val Tyr Leu Phe Tyr Leu Leu Arg
 1 5 10 15
 Ser Asn Ile Trp Leu Glu Met Gly Ile Pro Lys Tyr Val Lys Glu Val
 20 25 30
 Glu Leu Arg Ser Leu Asp Phe Thr Ser Asn Tyr Phe Ser *
 35 40 45

<210> 866
 <211> 189
 <212> PRT
 <213> Homo sapiens

<400> 866
 Met Asp Trp Thr Trp Arg Phe Leu Phe Val Val Ala Ala Ala Thr Gly
 1 5 10 15
 Val Gln Ser Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys
 20 25 30
 Pro Gly Ser Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe

```

      35      40      45
Ser Thr Tyr Ala Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu
  50      55      60
Glu Trp Met Gly Gly Ile Ile Pro Ile Phe Gly Thr Ala Asn Tyr Ala
  65      70      75      80
Gln Lys Phe Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Ser
      85      90      95
Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val
      100      105      110
Tyr Tyr Cys Ala Arg Val Trp Gly Gly Ser Gly Ser Tyr Tyr Ser Ile
      115      120      125
Val Ser Thr Ile Gly Ala Thr Thr Thr Val Trp Met Ser Gly Ala Arg
      130      135      140
Glu Pro Trp Ser Pro Ser Pro Gln Pro Pro Pro Arg Ala His Arg Ser
      145      150      155      160
Ser Pro Trp His Pro Pro Pro Arg Ala Pro Leu Gly Ala Gln Arg Pro
      165      170      175
Trp Ala Ala Trp Ser Arg Thr Thr Ser Pro Asn Arg *
      180      185      188

```

<210> 867
 <211> 189
 <212> PRT
 <213> Homo sapiens

```

      <400> 867
Met Asp Trp Thr Trp Arg Phe Leu Phe Val Val Ala Ala Ala Thr Gly
  1      5      10      15
Val Gln Ser Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys
      20      25      30
Pro Gly Ser Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe
      35      40      45
Ser Thr Tyr Ala Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu
      50      55      60
Glu Trp Met Gly Gly Ile Ile Pro Ile Phe Gly Thr Ala Asn Tyr Ala
      65      70      75      80
Gln Lys Phe Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Ser
      85      90      95
Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val
      100      105      110
Tyr Tyr Cys Ala Arg Val Trp Gly Gly Ser Gly Ser Tyr Tyr Ser Ile
      115      120      125
Val Ser Thr Ile Gly Ala Thr Thr Thr Val Trp Met Ser Gly Ala Arg
      130      135      140
Glu Pro Trp Ser Pro Ser Pro Gln Pro Pro Pro Arg Ala His Arg Ser
      145      150      155      160
Ser Pro Trp His Pro Pro Pro Arg Ala Pro Leu Gly Ala Gln Arg Pro
      165      170      175
Trp Ala Ala Trp Ser Arg Thr Thr Ser Pro Asn Arg *
      180      185      188

```

<210> 868
 <211> 276
 <212> PRT
 <213> Homo sapiens

```

      <400> 868
Met Ala Cys Pro Gly Phe Leu Trp Ala Leu Val Ile Ser Thr Cys Leu

```

```

      1           5           10           15
Glu Phe Ser Met Ala Gln Thr Val Thr Gln Ser Gln Pro Glu Met Ser
      20           25           30
Val Gln Glu Ala Glu Thr Val Thr Leu Ser Cys Thr Tyr Asp Thr Ser
      35           40           45
Glu Ser Asp Tyr Tyr Leu Phe Trp Tyr Lys Gln Pro Pro Ser Arg Gln
      50           55           60
Met Ile Leu Val Ile Arg Gln Glu Ala Tyr Lys Gln Gln Asn Ala Thr
      65           70           75           80
Glu Asn Arg Phe Ser Val Asn Phe Gln Lys Ala Ala Lys Ser Phe Ser
      85           90           95
Leu Lys Ile Ser Asp Ser Gln Leu Gly Asp Ala Ala Met Tyr Phe Cys
      100          105          110
Ala Tyr Arg Ser Gly Arg Asp Asp Lys Ile Ile Phe Gly Lys Gly Thr
      115          120          125
Arg Leu His Ile Leu Pro Asn Ile Gln Asn Pro Asp Pro Ala Val Tyr
      130          135          140
Gln Leu Arg Asp Ser Lys Ser Ser Asp Lys Ser Val Cys Leu Phe Thr
      145          150          155          160
Asp Phe Asp Ser Gln Thr Asn Val Ser Gln Ser Lys Asp Ser Asp Val
      165          170          175
Tyr Ile Thr Asp Lys Thr Val Leu Asp Met Arg Ser Met Asp Phe Lys
      180          185          190
Ser Asn Ser Ala Val Ala Trp Ser Asn Lys Ser Asp Phe Ala Cys Ala
      195          200          205
Asn Ala Phe Asn Asn Ser Ile Ile Pro Glu Asp Thr Phe Phe Pro Ser
      210          215          220
Pro Glu Ser Ser Cys Asp Val Lys Leu Val Glu Lys Ser Phe Glu Thr
      225          230          235          240
Asp Thr Asn Leu Asn Phe Gln Asn Leu Ser Val Ile Gly Phe Arg Ile
      245          250          255
Leu Leu Leu Lys Val Ala Gly Phe Asn Leu Leu Met Thr Leu Arg Leu
      260          265          270
Trp Ser Ser *
      275

```

<210> 869
 <211> 49
 <212> PRT
 <213> Homo sapiens

```

      <400> 869
Met Val Leu Arg Leu Pro Trp Trp Gly Val Leu Ala Tyr Gly Asn Asp
      1           5           10           15
Val Gly Phe Gly Phe Tyr Ser Phe Leu Cys Tyr Gln Ile Asn Pro Pro
      20           25           30
Thr Cys Pro Ile Leu Trp Leu Trp Glu Val Leu Thr Val Gly Lys Ser
      35           40           45           48
*

```

<210> 870
 <211> 98
 <212> PRT
 <213> Homo sapiens

```

      <400> 870
Met Glu Phe Leu Gly Pro Cys Gly Leu Arg Leu Val Gly Ala Arg Pro

```

```

      1           5           10           15
Leu Leu Pro Tyr Trp Leu Leu Val Phe Leu Ala Ala Leu Asn Ala Leu
      20           25           30
Leu Gln Trp Leu Leu Arg Pro Leu Val Leu Tyr Ala Pro Leu Leu Asn
      35           40           45
Pro Tyr Thr Leu Ala Val Ala Asn Thr Thr Phe Thr Val Ser Thr Asp
      50           55           60
Lys Ala Gln Arg His Phe Gly Tyr Glu Pro Pro Phe Ser Trp Glu Asp
      65           70           75           80
Ser Arg Thr Arg Thr Ile Leu Trp Val Gln Ala Ala Thr Gly Ser Ala
      85           90           95
Gln *
97

```

```

<210> 871
<211> 259
<212> PRT
<213> Homo sapiens

```

```

      <400> 871
Met Pro Arg Pro Arg Arg Val Ser Gln Leu Leu Asp Leu Cys Leu Trp
      1           5           10           15
Cys Phe Met Lys Asn Ile Ser Arg Tyr Leu Thr Asp Ile Lys Pro Leu
      20           25           30
Pro Pro Asn Ile Lys Asp Arg Leu Ile Lys Ile Met Ser Met Gln Gly
      35           40           45
Gln Ile Thr Asp Ser Asn Ile Ser Glu Ile Leu His Pro Glu Val Gln
      50           55           60
Thr Leu Asp Leu Arg Ser Cys Asp Ile Ser Asp Ala Ala Leu Leu His
      65           70           75           80
Leu Ser Asn Cys Arg Lys Leu Lys Lys Leu Asn Leu Asn Ala Ser Lys
      85           90           95
Gly Asn Arg Val Ser Val Thr Ser Glu Gly Ile Lys Ala Val Ala Ser
      100          105          110
Ser Cys Ser Tyr Leu His Glu Ala Ser Leu Lys Arg Cys Cys Asn Leu
      115          120          125
Thr Asp Glu Gly Val Val Ala Leu Ala Leu Asn Cys Gln Leu Leu Lys
      130          135          140
Ile Ile Asp Leu Gly Gly Cys Leu Ser Ile Thr Asp Val Ser Leu His
      145          150          155          160
Ala Leu Gly Lys Asn Cys Pro Phe Leu Gln Cys Val Asp Phe Ser Ala
      165          170          175
Thr Gln Val Ser Asp Ser Gly Val Ile Ala Leu Val Ser Gly Pro Cys
      180          185          190
Ala Lys Lys Leu Glu Glu Ile His Met Gly His Cys Val Asn Leu Thr
      195          200          205
Asp Gly Ala Val Glu Ala Val Leu Thr Tyr Cys Pro Gln Ile Arg Ile
      210          215          220
Leu Leu Phe His Gly Cys Pro Leu Ile Thr Asp His Ser Arg Glu Val
      225          230          235          240
Leu Glu Gln Leu Val Gly Pro Asn Lys Leu Lys Gln Val Thr Trp Thr
      245          250          255
Val Tyr *
258

```

```

<210> 872
<211> 464
<212> PRT
<213> Homo sapiens

```

<400> 872

Met	Leu	Leu	Leu	Leu	Leu	Pro	Leu	Leu	Trp	Gly	Arg	Glu	Arg	Ala	Glu
1				5					10					15	
Gly	Gln	Thr	Ser	Lys	Leu	Leu	Thr	Met	Gln	Ser	Ser	Val	Thr	Val	Gln
			20					25						30	
Glu	Gly	Leu	Cys	Val	His	Val	Pro	Cys	Ser	Phe	Ser	Tyr	Pro	Ser	His
		35					40					45			
Gly	Trp	Ile	Tyr	Pro	Gly	Pro	Val	Val	His	Gly	Tyr	Trp	Phe	Arg	Glu
	50					55					60				
Gly	Ala	Asn	Thr	Asp	Gln	Asp	Ala	Pro	Val	Ala	Thr	Asn	Asn	Pro	Ala
	65				70					75				80	
Arg	Ala	Val	Trp	Glu	Thr	Arg	Asp	Arg	Phe	His	Leu	Leu	Gly	Asp	
				85				90						95	
Pro	His	Thr	Glu	Asn	Cys	Thr	Leu	Ser	Ile	Arg	Asp	Ala	Arg	Arg	Ser
		100						105					110		
Asp	Ala	Gly	Arg	Tyr	Phe	Phe	Arg	Met	Glu	Lys	Gly	Ser	Ile	Lys	Trp
	115						120					125			
Asn	Tyr	Lys	His	His	Arg	Leu	Ser	Val	Asn	Val	Thr	Ala	Leu	Thr	His
	130					135					140				
Arg	Pro	Asn	Ile	Leu	Ile	Pro	Gly	Thr	Leu	Glu	Ser	Gly	Cys	Pro	Gln
	145			150						155					160
Asn	Leu	Thr	Cys	Ser	Val	Pro	Trp	Ala	Cys	Glu	Gln	Gly	Thr	Pro	Pro
			165					170						175	
Met	Ile	Ser	Trp	Ile	Gly	Thr	Ser	Val	Ser	Pro	Leu	Asp	Pro	Ser	Thr
		180					185						190		
Thr	Arg	Ser	Ser	Val	Leu	Thr	Leu	Ile	Pro	Gln	Pro	Gln	Asp	His	Gly
	195						200					205			
Thr	Ser	Leu	Thr	Cys	Gln	Val	Thr	Phe	Pro	Gly	Ala	Ser	Val	Thr	Thr
	210					215					220				
Asn	Lys	Thr	Val	His	Leu	Asn	Val	Ser	Tyr	Pro	Pro	Gln	Asn	Leu	Thr
	225				230					235					240
Met	Thr	Val	Phe	Gln	Gly	Asp	Gly	Thr	Val	Ser	Thr	Val	Leu	Gly	Asn
			245					250						255	
Gly	Ser	Ser	Leu	Ser	Leu	Pro	Glu	Gly	Gln	Ser	Leu	Arg	Leu	Val	Cys
		260					265						270		
Ala	Val	Asp	Ala	Val	Asp	Ser	Asn	Pro	Pro	Ala	Arg	Leu	Ser	Leu	Ser
	275						280					285			
Trp	Arg	Gly	Leu	Thr	Leu	Cys	Pro	Ser	Gln	Pro	Ser	Asn	Pro	Gly	Val
	290					295					300				
Leu	Glu	Leu	Pro	Trp	Val	His	Leu	Arg	Asp	Glu	Asp	Glu	Phe	Thr	Cys
	305				310					315					320
Arg	Ala	Gln	Asn	Pro	Leu	Gly	Ser	Gln	Gln	Val	Tyr	Leu	Asn	Val	Ser
			325						330					335	
Leu	Gln	Ser	Lys	Ala	Thr	Ser	Gly	Val	Thr	Gln	Gly	Ala	Val	Gly	Gly
		340					345						350		
Ala	Gly	Ala	Thr	Ala	Leu	Val	Phe	Leu	Ser	Phe	Cys	Val	Ile	Phe	Val
	355					360						365			
Val	Val	Arg	Ser	Cys	Arg	Lys	Lys	Ser	Ala	Arg	Pro	Ala	Ala	Gly	Val
	370					375					380				
Gly	Asp	Thr	Gly	Ile	Glu	Asp	Ala	Asn	Ala	Val	Arg	Gly	Ser	Ala	Ser
	385				390					395					400
Gln	Gly	Pro	Leu	Thr	Glu	Pro	Trp	Ala	Glu	Asp	Ser	Pro	Pro	Asp	Gln
			405						410					415	
Pro	Pro	Pro	Ala	Ser	Ala	Arg	Ser	Ser	Val	Gly	Glu	Gly	Glu	Leu	Gln
		420						425					430		
Tyr	Ala	Ser	Leu	Ser	Phe	Gln	Met	Val	Lys	Pro	Trp	Asp	Ser	Arg	Gly
	435						440					445			
Gln	Glu	Ala	Thr	Asp	Thr	Glu	Tyr	Ser	Glu	Ile	Lys	Ile	His	Arg	*
	450					455					460			463	

<210> 873
 <211> 59
 <212> PRT
 <213> Homo sapiens

<400> 873
 Met Leu Phe Gly Leu Ala Leu Gln Leu Ile Leu Asp Leu Lys Leu Thr
 1 5 10 15
 Thr Val Asn Gln Arg Glu Ser Asp Val Ala Arg Val Ala Thr Ala Glu
 20 25 30
 Glu Tyr Ser Lys Lys Gly Leu Leu Gly Gln Glu Thr Leu His Ala Gly
 35 40 45
 Ser Gln Thr Arg Met Gln Ile Leu Ile Ser *
 50 55 58

<210> 874
 <211> 71
 <212> PRT
 <213> Homo sapiens

<400> 874
 Met Leu Lys Leu Leu Cys Ala Ala Glu Val Thr Asn Val Leu Phe Asn
 1 5 10 15
 Cys Val Phe Asp Tyr Gly Cys Pro Lys Thr Phe Cys His Pro Trp Thr
 20 25 30
 Ile Phe Val Leu Phe Trp Ser Ser Leu Glu Gly Gly Phe Ile Ile Ser
 35 40 45
 Tyr Lys Thr Leu Thr Gly Ala Leu Glu Cys Arg Phe Leu Ile Thr Leu
 50 55 60
 Glu Ile Val Thr Ser Glu *
 65 70

<210> 875
 <211> 239
 <212> PRT
 <213> Homo sapiens

<400> 875
 Met Arg Ser Ser Leu Thr Met Val Gly Thr Leu Trp Ala Phe Leu Ser
 1 5 10 15
 Leu Val Thr Ala Val Thr Ser Ser Thr Ser Tyr Phe Leu Pro Tyr Trp
 20 25 30
 Leu Phe Gly Ser Gln Met Gly Lys Pro Val Ser Phe Ser Thr Phe Arg
 35 40 45
 Arg Cys Asn Tyr Pro Val Arg Gly Glu Gly His Ser Leu Ile Met Val
 50 55 60
 Glu Glu Cys Gly Arg Tyr Ala Ser Phe Asn Ala Ile Pro Ser Leu Ala
 65 70 75 80
 Trp Gln Met Cys Thr Val Val Thr Gly Ala Gly Cys Ala Leu Leu Leu
 85 90 95
 Leu Val Ala Leu Ala Ala Val Leu Gly Cys Cys Met Glu Glu Leu Ile
 100 105 110
 Ser Arg Met Met Gly Arg Cys Met Gly Ala Ala Gln Phe Val Gly Gly
 115 120 125
 Leu Leu Ile Ser Ser Gly Cys Ala Leu Tyr Pro Leu Gly Trp Asn Ser
 130 135 140
 Pro Glu Ile Met Gln Thr Cys Gly Asn Val Ser Asn Gln Phe Gln Leu

145		150		155		160
Gly Thr Cys Arg	Leu Gly Trp Ala Tyr Tyr Cys Ala Gly Gly Gly Ala					
	165	170	175			
Ala Ala Ala Met	Leu Ile Cys Thr Trp Leu Ser Cys Phe Ala Gly Arg					
	180	185	190			
Asn Pro Lys Pro	Val Ile Leu Gly Gly Lys His His Glu Glu Asn His					
	195	200	205			
Phe Leu Cys Tyr	Gly Ala Trp Pro Leu Pro Ser Thr Leu Glu Leu Arg					
	210	215	220			
Lys Glu Asp Arg	Gly Gly Arg Ala Thr Gly Lys Gln Val Thr Pro					
225	230	235	239			

<210> 876
 <211> 239
 <212> PRT
 <213> Homo sapiens

<400> 876

Met Arg Ser Ser	Leu Thr Met Val Gly Thr Leu Trp Ala Phe Leu Ser
1	5 10 15
Leu Val Thr Ala	Val Thr Ser Ser Thr Ser Tyr Phe Leu Pro Tyr Trp
	20 25 30
Leu Phe Gly Ser	Gln Met Gly Lys Pro Val Ser Phe Ser Thr Phe Arg
	35 40 45
Arg Cys Asn Tyr	Pro Val Arg Gly Glu Gly His Ser Leu Ile Met Val
	50 55 60
Glu Glu Cys Gly	Arg Tyr Ala Ser Phe Asn Ala Ile Pro Ser Leu Ala
	65 70 75 80
Trp Gln Met Cys	Thr Val Val Thr Gly Ala Gly Cys Ala Leu Leu Leu
	85 90 95
Leu Val Ala Leu	Ala Ala Val Leu Gly Cys Cys Met Glu Glu Leu Ile
	100 105 110
Ser Arg Met Met	Gly Arg Cys Met Gly Ala Ala Gln Phe Val Gly Gly
	115 120 125
Leu Leu Ile Ser	Ser Gly Cys Ala Leu Tyr Pro Leu Gly Trp Asn Ser
	130 135 140
Pro Glu Ile Met	Gln Thr Cys Gly Asn Val Ser Asn Gln Phe Gln Leu
145	150 155 160
Gly Thr Cys Arg	Leu Gly Trp Ala Tyr Tyr Cys Ala Gly Gly Gly Ala
	165 170 175
Ala Ala Ala Met	Leu Ile Cys Thr Trp Leu Ser Cys Phe Ala Gly Arg
	180 185 190
Asn Pro Lys Pro	Val Ile Leu Gly Gly Lys His His Glu Glu Asn His
	195 200 205
Phe Leu Cys Tyr	Gly Ala Trp Pro Leu Pro Ser Thr Leu Glu Leu Arg
	210 215 220
Lys Glu Asp Arg	Gly Gly Arg Ala Thr Gly Lys Gln Val Thr Pro
225	230 235 239

<210> 877
 <211> 525
 <212> PRT
 <213> Homo sapiens

<400> 877

Met Ser Leu Leu	Leu Pro Trp Leu Gly Leu Arg Pro Val Ala Met
1	5 10 15
Ser Pro Trp Leu	Leu Leu Leu Val Val Gly Ser Trp Leu Leu Ala

699

<210> 878
 <211> 525
 <212> PRT
 <213> Homo sapiens

<400> 878
 Met Ser Leu Leu Ser Leu Pro Trp Leu Gly Leu Arg Pro Val Ala Met
 1 5 10 15
 Ser Pro Trp Leu Leu Leu Leu Val Val Gly Ser Trp Leu Leu Ala
 20 25 30
 Arg Ile Leu Ala Trp Thr Tyr Ala Phe Tyr Asn Asn Cys Arg Arg Leu
 35 40 45
 Gln Cys Phe Pro Gln Pro Pro Lys Arg Asn Trp Phe Trp Gly His Leu
 50 55 60
 Gly Leu Ile Thr Pro Thr Glu Glu Gly Leu Lys Asp Ser Thr Gln Met
 65 70 75 80
 Ser Ala Thr Tyr Ser Gln Gly Phe Thr Val Trp Leu Gly Pro Ile Ile
 85 90 95
 Pro Phe Ile Val Leu Cys His Pro Asp Thr Ile Arg Ser Ile Thr Asn
 100 105 110
 Ala Ser Ala Ala Ile Ala Pro Lys Asp Asn Leu Phe Ile Arg Phe Leu
 115 120 125
 Lys Pro Trp Leu Gly Glu Gly Ile Leu Leu Ser Gly Gly Asp Lys Trp
 130 135 140
 Ser Arg His Arg Arg Met Leu Thr Pro Ala Phe His Phe Asn Ile Leu
 145 150 155 160
 Lys Ser Tyr Ile Thr Ile Phe Asn Lys Ser Ala Asn Ile Met Leu Asp
 165 170 175
 Lys Trp Gln His Leu Ala Ser Glu Gly Ser Ser Cys Leu Asp Met Phe
 180 185 190
 Glu His Ile Ser Leu Met Thr Leu Asp Ser Leu Gln Lys Cys Ile Phe
 195 200 205
 Ser Phe Asp Ser His Cys Gln Glu Arg Pro Ser Glu Tyr Ile Ala Thr
 210 215 220
 Ile Leu Glu Leu Ser Ala Leu Val Glu Lys Arg Ser Gln His Ile Leu
 225 230 235 240
 Gln His Met Asp Phe Leu Tyr Tyr Leu Ser His Asp Gly Arg Arg Phe
 245 250 255
 His Arg Ala Cys Arg Leu Val His Asp Phe Thr Asp Ala Val Ile Arg
 260 265 270
 Glu Arg Arg Arg Thr Leu Pro Thr Gln Gly Ile Asp Asp Phe Phe Lys
 275 280 285
 Asp Lys Ala Lys Ser Lys Thr Leu Asp Phe Ile Asp Val Leu Leu Leu
 290 295 300
 Ser Lys Asp Glu Asp Gly Lys Ala Leu Ser Asp Glu Asp Ile Arg Ala
 305 310 315 320
 Glu Ala Asp Thr Phe Met Phe Gly Gly His Asp Thr Thr Ala Ser Gly
 325 330 335
 Leu Ser Trp Val Leu Tyr Asn Leu Ala Arg His Pro Glu Tyr Gln Glu
 340 345 350
 Arg Cys Arg Gln Glu Val Gln Glu Leu Leu Lys Asp Arg Asp Pro Lys
 355 360 365
 Glu Ile Glu Trp Asp Asp Leu Ala Gln Leu Pro Phe Leu Thr Met Cys
 370 375 380
 Val Lys Glu Ser Leu Arg Leu His Pro Pro Ala Pro Phe Ile Ser Arg
 385 390 395 400
 Cys Cys Thr Gln Asp Ile Val Leu Pro Asp Gly Arg Val Ile Pro Lys
 405 410 415
 Gly Ile Thr Cys Leu Ile Asp Ile Ile Gly Val His His Asn Pro Thr
 420 425 430
 Val Trp Pro Asp Pro Glu Val Tyr Asp Pro Phe Arg Phe Asp Pro Glu

```

      435              440              445
Asn Ser Lys Gly Arg Ser Pro Leu Ala Phe Ile Pro Phe Ser Ala Gly
      450              455              460
Pro Arg Asn Cys Ile Gly Gln Ala Phe Ala Met Ala Glu Met Lys Val
465              470              475              480
Val Leu Ala Leu Met Leu Leu His Phe Arg Phe Leu Pro Asp His Thr
      485              490              495
Glu Pro Arg Arg Lys Leu Glu Leu Ile Met Arg Ala Glu Gly Gly Leu
      500              505              510
Trp Leu Arg Val Glu Pro Leu Asn Val Ser Leu Gln *
      515              520              524

```

<210> 879
 <211> 525
 <212> PRT
 <213> Homo sapiens

```

      <400> 879
Met Ser Leu Leu Ser Leu Pro Trp Leu Gly Leu Arg Pro Val Ala Met
 1              5              10              15
Ser Pro Trp Leu Leu Leu Leu Leu Val Val Gly Ser Trp Leu Leu Ala
      20              25              30
Arg Ile Leu Ala Trp Thr Tyr Ala Phe Tyr Asn Asn Cys Arg Arg Leu
      35              40              45
Gln Cys Phe Pro Gln Pro Pro Lys Arg Asn Trp Phe Trp Gly His Leu
      50              55              60
Gly Leu Ile Thr Pro Thr Glu Glu Gly Leu Lys Asp Ser Thr Gln Met
      65              70              75              80
Ser Ala Thr Tyr Ser Gln Gly Phe Thr Val Trp Leu Gly Pro Ile Ile
      85              90              95
Pro Phe Ile Val Leu Cys His Pro Asp Thr Ile Arg Ser Ile Thr Asn
      100              105              110
Ala Ser Ala Ala Ile Ala Pro Lys Asp Asn Leu Phe Ile Arg Phe Leu
      115              120              125
Lys Pro Trp Leu Gly Glu Gly Ile Leu Leu Ser Gly Gly Asp Lys Trp
      130              135              140
Ser Arg His Arg Arg Met Leu Thr Pro Ala Phe His Phe Asn Ile Leu
      145              150              155              160
Lys Ser Tyr Ile Thr Ile Phe Asn Lys Ser Ala Asn Ile Met Leu Asp
      165              170              175
Lys Trp Gln His Leu Ala Ser Glu Gly Ser Ser Cys Leu Asp Met Phe
      180              185              190
Glu His Ile Ser Leu Met Thr Leu Asp Ser Leu Gln Lys Cys Ile Phe
      195              200              205
Ser Phe Asp Ser His Cys Gln Glu Arg Pro Ser Glu Tyr Ile Ala Thr
      210              215              220
Ile Leu Glu Leu Ser Ala Leu Val Glu Lys Arg Ser Gln His Ile Leu
      225              230              235              240
Gln His Met Asp Phe Leu Tyr Tyr Leu Ser His Asp Gly Arg Arg Phe
      245              250              255
His Arg Ala Cys Arg Leu Val His Asp Phe Thr Asp Ala Val Ile Arg
      260              265              270
Glu Arg Arg Arg Thr Leu Pro Thr Gln Gly Ile Asp Asp Phe Phe Lys
      275              280              285
Asp Lys Ala Lys Ser Lys Thr Leu Asp Phe Ile Asp Val Leu Leu Leu
      290              295              300
Ser Lys Asp Glu Asp Gly Lys Ala Leu Ser Asp Glu Asp Ile Arg Ala
      305              310              315              320
Glu Ala Asp Thr Phe Met Phe Gly Gly His Asp Thr Thr Ala Ser Gly
      325              330              335
Leu Ser Trp Val Leu Tyr Asn Leu Ala Arg His Pro Glu Tyr Gln Glu

```

```

      340      345      350
Arg Cys Arg Gln Glu Val Gln Glu Leu Leu Lys Asp Arg Asp Pro Lys
      355      360      365
Glu Ile Glu Trp Asp Asp Leu Ala Gln Leu Pro Phe Leu Thr Met Cys
      370      375      380
Val Lys Glu Ser Leu Arg Leu His Pro Pro Ala Pro Phe Ile Ser Arg
385      390      395      400
Cys Cys Thr Gln Asp Ile Val Leu Pro Asp Gly Arg Val Ile Pro Lys
      405      410      415
Gly Ile Thr Cys Leu Ile Asp Ile Ile Gly Val His His Asn Pro Thr
      420      425      430
Val Trp Pro Asp Pro Glu Val Tyr Asp Pro Phe Arg Phe Asp Pro Glu
      435      440      445
Asn Ser Lys Gly Arg Ser Pro Leu Ala Phe Ile Pro Phe Ser Ala Gly
      450      455      460
Pro Arg Asn Cys Ile Gly Gln Ala Phe Ala Met Ala Glu Met Lys Val
465      470      475      480
Val Leu Ala Leu Met Leu Leu His Phe Arg Phe Leu Pro Asp His Thr
      485      490      495
Glu Pro Arg Arg Lys Leu Glu Leu Ile Met Arg Ala Glu Gly Gly Leu
      500      505      510
Trp Leu Arg Val Glu Pro Leu Asn Val Ser Leu Gln *
      515      520      524

```

<210> 880
 <211> 200
 <212> PRT
 <213> Homo sapiens

```

      <400> 880
Met Arg Leu Ser Leu Pro Leu Leu Leu Leu Leu Leu Gly Ala Trp Ala
  1      5      10      15
Ile Pro Gly Gly Leu Gly Val Met Ala Pro Leu Thr Ala Thr Ala Pro
      20      25      30
Glu Val Asp Asp Glu Glu Met Tyr Ser Ala His Met Pro Ala His Leu
      35      40      45
Arg Cys Asp Ala Cys Arg Ala Val Ala Tyr Gln Glu Cys Gly Pro Lys
      50      55      60
Thr Leu Ala Lys Ala Glu Thr Lys Leu His Thr Ser Asn Ser Gly Gly
      65      70      75      80
Arg Arg Asp Val Ser Glu Leu Val Tyr Thr Asp Val Leu Asp Arg Ser
      85      90      95
Cys Ser Arg Asn Trp Gln Asp Tyr Gly Val Arg Glu Val Asp Gln Val
      100      105      110
Lys Arg Leu Thr Gly Pro Gly Leu Ser Glu Gly Pro Glu Pro Ser Ile
      115      120      125
Ser Val Met Val Thr Gly Gly Pro Trp His Thr Arg Leu Ser Arg Thr
      130      135      140
Cys Leu His Tyr Leu Gly Glu Phe Gly Glu Asp Gln Ile Tyr Glu Ala
145      150      155      160
His Gln Gln Gly Arg Gly Ala Leu Glu Ala Leu Leu Cys Gly Gly Pro
      165      170      175
Pro Gly Gly Leu Leu Arg Glu Gly Val Ser His Lys Arg Arg Ala Leu
      180      185      190
Val Leu Asp Ser Thr Leu Leu *
      195      199

```

<210> 881
 <211> 147

<212> PRT

<213> Homo sapiens

<400> 881

```

Met Thr Leu Arg Pro Ser Leu Leu Pro Leu His Leu Leu Leu Leu Leu
 1      5      10      15
Leu Leu Ser Ala Ala Val Cys Arg Ala Glu Ala Gly Leu Glu Thr Glu
      20      25      30
Ser Pro Val Arg Thr Leu Gln Val Glu Thr Leu Val Glu Pro Pro Glu
      35      40      45
Pro Cys Ala Glu Pro Ala Ala Phe Gly Asp Thr Leu His Ile His Tyr
      50      55      60
Thr Gly Ser Leu Val Asp Gly Arg Ile Ile Asp Thr Ser Leu Thr Arg
      65      70      75      80
Asp Pro Leu Val Ile Glu Leu Gly Gln Lys Gln Val Ile Pro Gly Leu
      85      90      95
Glu Gln Ser Leu Leu Asp Met Cys Val Gly Glu Lys Arg Arg Ala Ile
      100     105     110
Ile Pro Ser His Leu Ala Tyr Gly Lys Arg Gly Phe Pro Pro Ser Val
      115     120     125
Pro Gly Thr Lys Asp Asn Leu Met Arg Pro Pro Gly Met Thr Ser Ser
      130     135     140
Ser Gln *
145 146

```

<210> 882

<211> 367

<212> PRT

<213> Homo sapiens

<400> 882

```

Met Ala Leu Arg Phe Leu Leu Gly Phe Leu Leu Ala Gly Val Asp Leu
 1      5      10      15
Gly Val Tyr Leu Met Arg Leu Glu Leu Cys Asp Pro Thr Gln Arg Leu
      20      25      30
Arg Val Ala Leu Ala Gly Glu Leu Val Gly Val Gly Gly His Phe Leu
      35      40      45
Phe Leu Gly Leu Ala Leu Val Ser Lys Asp Trp Arg Phe Leu Gln Arg
      50      55      60
Met Ile Thr Ala Pro Cys Ile Leu Phe Leu Phe Tyr Gly Trp Pro Gly
      65      70      75      80
Leu Phe Leu Glu Ser Ala Arg Trp Leu Ile Val Lys Arg Gln Ile Glu
      85      90      95
Glu Ala Gln Ser Val Leu Arg Ile Leu Ala Glu Arg Asn Arg Pro His
      100     105     110
Gly Gln Met Leu Gly Glu Glu Ala Gln Glu Ala Leu Gln Asp Leu Glu
      115     120     125
Asn Thr Cys Pro Leu Pro Ala Thr Ser Ser Phe Ser Phe Ala Ser Leu
      130     135     140
Leu Asn Tyr Arg Asn Ile Trp Lys Asn Leu Leu Ile Leu Gly Phe Thr
      145     150     155     160
Asn Phe Ile Ala His Ala Ile Arg His Cys Tyr Gln Pro Val Gly Gly
      165     170     175
Gly Gly Ser Pro Ser Asp Phe Tyr Leu Cys Ser Leu Leu Ala Ser Gly
      180     185     190
Thr Ala Ala Leu Ala Cys Val Phe Leu Gly Val Thr Val Asp Arg Phe
      195     200     205
Gly Arg Arg Gly Ile Leu Leu Leu Ser Met Thr Leu Thr Gly Ile Ala
      210     215     220
Ser Leu Val Leu Leu Gly Leu Trp Asp Tyr Leu Asn Glu Ala Ala Ile

```

```

225          230          235          240
Thr Thr Phe Ser Val Leu Gly Leu Phe Ser Ser Gln Ala Ala Ala Ile
          245          250          255
Leu Ser Thr Leu Leu Ala Ala Glu Val Ile Pro Thr Thr Val Arg Gly
          260          265          270
Arg Gly Leu Gly Leu Ile Met Ala Leu Gly Ala Leu Gly Gly Leu Ser
          275          280          285
Gly Pro Ala Gln Arg Leu His Met Gly His Gly Ala Phe Leu Gln His
          290          295          300
Val Val Leu Ala Ala Cys Ala Leu Leu Cys Ile Leu Ser Ile Met Leu
305          310          315
Leu Pro Glu Thr Lys Arg Lys Leu Leu Pro Glu Val Leu Arg Asp Gly
          325          330          335
Glu Leu Cys Arg Arg Pro Ser Leu Leu Arg Gln Pro Pro Pro Thr Arg
          340          345          350
Cys Asp His Val Pro Leu Leu Ala Thr Pro Asn Pro Ala Leu *
          355          360          365 366

```

<210> 883
 <211> 58
 <212> PRT
 <213> Homo sapiens

```

<400> 883
Met Val Lys Arg Lys Ser Trp Thr Lys Trp Cys Gly Trp Leu Thr Val
  1          5          10          15
Val Arg Phe Leu Ala Arg Gly Phe Glu Met His Leu Lys Ser Cys Ser
          20          25          30
Arg Leu Leu Phe Ser Glu Leu Ala Phe Ala Phe Phe Glu Phe Ser
          35          40          45
Leu Lys Thr Val Thr Leu Arg Ala Phe *
          50          55          57

```

<210> 884
 <211> 54
 <212> PRT
 <213> Homo sapiens

```

<400> 884
Met Cys Leu Met Lys Gln Ile Ile Tyr Leu Leu Tyr Val Gly Leu Cys
  1          5          10          15
Ser Ile Leu Thr Ala Phe Leu Phe Thr Pro His His Val Leu Glu Arg
          20          25          30
Tyr Arg Tyr Tyr Cys Pro Asp Phe Arg Glu Ile Lys Lys Leu Gly Gln
          35          40          45
Gly Tyr Thr Thr Asn *
          50          53

```

<210> 885
 <211> 103
 <212> PRT
 <213> Homo sapiens

```

<400> 885
Met Lys Glu Ala Leu Leu Lys Cys Ser Arg Leu Ala Arg Gly Leu Leu

```

```

      1           5           10           15
Leu Cys Leu Asp Cys Ala Asn Asp His Arg Ser Pro Val Glu Arg Asn
      20           25           30
Ala Gln Thr Thr Leu Ile Leu His Ser Ser Leu Tyr Ser Leu Ser Leu
      35           40           45
Gly Asn Gln Leu Gln Gly Gly Gly Glu Met Ala Thr Thr Gly Gly Ser
      50           55           60
Thr Gln Gln Ala Lys Thr Tyr Gly Gly Leu Phe Gln Ile Gly Ala Met
      65           70           75           80
Glu Pro Ala Leu Phe Leu Leu Phe Ile Phe Leu Leu Ala Ser Phe Trp
      85           90           95
Val His Arg Ala Ile Glu *
      100          102

```

<210> 886
 <211> 48
 <212> PRT
 <213> Homo sapiens

```

      <400> 886
Met Leu Glu Thr Phe Leu Phe Lys Leu Phe Leu Phe Phe Thr Leu Leu
      1           5           10           15
Val Asn Leu Phe Ile Thr Asn Asp Gln Leu Ser Val Gly Ser Ile Phe
      20           25           30
Leu Ser Phe Gln Leu Pro Ala Phe Phe Leu Asp Met Ala Glu Phe *
      35           40           45           47

```

<210> 887
 <211> 47
 <212> PRT
 <213> Homo sapiens

```

      <400> 887
Met Thr Phe Leu Leu His Val Leu Val Thr Ala Leu Ser Ser His Ser
      1           5           10           15
Thr Gly Arg Arg Gly Thr Asn Cys Phe Met Leu Leu Ser Ser Gly Asn
      20           25           30
His Pro Ile Pro Cys Gly Ser Leu Thr Pro Tyr Pro His Leu *
      35           40           45           46

```

<210> 888
 <211> 62
 <212> PRT
 <213> Homo sapiens

```

      <400> 888
Met Val Tyr Leu Pro Val Ser Leu Asn Gly Leu Arg Leu Ala Cys Phe
      1           5           10           15
Ser Tyr Val Leu Ala Pro Ile Lys Val Lys Pro Gly Gly Gly Ser Glu
      20           25           30
Thr Arg Asp Gly Phe Arg Ile Pro Glu Ser Thr Pro Ser Leu Lys Ala
      35           40           45
Gly Tyr Cys Asp His Lys His Phe Leu Pro Thr Ile His Leu
      50           55           60           62

```

<210> 889
 <211> 55
 <212> PRT
 <213> Homo sapiens

<400> 889
 Met Thr Leu Leu Asn Leu Tyr Tyr Leu Asn Ser Phe Leu Leu Tyr Ser
 1 5 10 15
 Lys Arg Phe Glu Gly Ile Ser Phe Cys Val Gln Lys Val Ser Ile Ile
 20 25 30
 Leu Cys Ile His Tyr Leu Arg Ser Thr Thr Ile Trp Asn Lys Leu Phe
 35 40 45
 Phe Arg Asp Val Ser Ala *
 50 54

<210> 890
 <211> 181
 <212> PRT
 <213> Homo sapiens

<400> 890
 Met His Phe Pro Val Asn Cys Phe Phe Lys Ser Leu His Ile Phe Leu
 1 5 10 15
 Leu Leu Gln Val Phe Leu Ala Thr Phe Leu Arg Lys Lys Leu Ser Lys
 20 25 30
 Val Ala Phe Ser Cys Leu Val Glu Phe Phe Tyr Tyr Cys Tyr Tyr Phe
 35 40 45
 Leu Asp Phe Ala Ser Ser Val Ser Phe Leu Phe Cys Phe Val Leu Leu
 50 55 60
 Leu Arg Gln Ser Leu Thr Leu Ser Pro Arg Leu Glu Cys Ser Asp Thr
 65 70 75 80
 Ile Leu Ala His Cys Asn Leu Arg Leu Pro Gly Ser Arg Tyr Ser Ser
 85 90 95
 Ala Ser Thr Ser Arg Val Ala Gly Ile Thr Gly Val His His Thr
 100 105 110
 Tyr Val Asn Phe Val Trp Thr Val Gln Lys Ala Val His Cys Val Gly
 115 120 125
 Gln Ala Ser Trp Glu Leu Leu Thr Ser Arg Asp Pro Pro Thr Leu Ala
 130 135 140
 Ser His Arg Ala Gly Ile Thr Gly Met Ser His Arg Thr Trp Ala Lys
 145 150 155 160
 Val Phe Leu Lys Arg Val Ile Phe Leu Asn Arg Glu Tyr Asp Leu Thr
 165 170 175
 Met Phe Cys Phe Leu
 180 181

<210> 891
 <211> 67
 <212> PRT
 <213> Homo sapiens

<400> 891
 Met Leu Val Pro Thr Phe Leu Ser Leu Val Cys Asp Phe Ser Leu Phe
 1 5 10 15
 Val Leu Leu Leu Leu Gly Cys Leu Ser Phe Leu Leu Pro Pro His Leu

20 25 30
 Pro Cys Thr Ser Phe Pro Leu His Leu Trp Arg Leu Leu Ser Pro Phe
 35 40 45
 Ile Ser Phe Leu Asp Leu Leu Leu Leu Ser Tyr Lys Met Asn Cys
 50 55 60
 Ile Ile *
 65 66

<210> 892
 <211> 75
 <212> PRT
 <213> Homo sapiens

<400> 892
 Met Leu Pro Leu Phe Lys His Ser Pro Val Arg Ile Phe Leu Phe Cys
 1 5 10 15
 Leu Asn Thr Gln His Leu Ser Val Arg Asn Asn Phe Val Phe Asn Cys
 20 25 30
 Val Ser Pro Gly Ile Leu Pro Ile Ser Leu Cys Leu Ala Phe Asn His
 35 40 45
 Asp Arg Ser Thr Phe Phe Phe Ser Ile Ile Leu Leu Leu Lys Ala Leu
 50 55 60
 Ile Ile Leu Ser Ser Leu Leu Gln Thr Lys *
 65 70 74

<210> 893
 <211> 79
 <212> PRT
 <213> Homo sapiens

<400> 893
 Met Lys Pro Ile Leu Leu Val Leu Ser Ser Ile Thr Arg Ala Leu Leu
 1 5 10 15
 Leu Gln Ile Ser Ser Val Ser Trp Gln Ser Cys Met Trp Arg Ala Met
 20 25 30
 Pro Asp Cys Leu Gln Thr Asp Tyr Pro Ile Ser Leu Gly Phe His Gln
 35 40 45
 Arg Thr Arg Leu Leu Asp Ala Leu Cys Pro Val Thr Gln Cys His His
 50 55 60
 Ser Ala Trp Pro Cys Val Cys Gln Gly Ala Gln Thr Pro Ile *
 65 70 75 78

<210> 894
 <211> 79
 <212> PRT
 <213> Homo sapiens

<400> 894
 Met Cys Cys Glu Leu Leu Ala Val Val Ile Ala Thr Leu Ile Ile Lys
 1 5 10 15
 Ile Gly Leu Val Val Leu Leu Tyr Phe Ile Lys Leu Leu Ile His Ile
 20 25 30
 Glu Phe Ile Lys Arg His Ser Ile Leu Lys Cys Glu Ser Ile Phe Asn
 35 40 45
 Leu Asn Val Gly Ile Arg Met Tyr Pro Gly Gln Val Asn Phe Cys Glu

50 55 60
 Thr Leu Gln Met Leu Asp Gly Phe Gly Arg Ile Phe Gln Thr Lys
 65 70 75 79

<210> 895
 <211> 860
 <212> PRT
 <213> Homo sapiens

<400> 895
 Met Ala Cys Arg Trp Ser Thr Lys Glu Ser Pro Arg Trp Arg Ser Ala
 1 5 10 15
 Leu Leu Leu Leu Phe Leu Ala Gly Val Tyr Gly Asn Gly Ala Leu Ala
 20 25 30
 Glu His Ser Glu Asn Val His Ile Ser Gly Val Ser Thr Ala Cys Gly
 35 40 45
 Glu Thr Pro Glu Gln Ile Arg Ala Pro Ser Gly Ile Ile Thr Ser Pro
 50 55 60
 Gly Trp Pro Ser Glu Tyr Pro Ala Lys Ile Asn Cys Ser Trp Phe Ile
 65 70 75 80
 Arg Ala Asn Pro Gly Glu Ile Ile Thr Ile Ser Phe Gln Asp Phe Asp
 85 90 95
 Ile Gln Gly Ser Arg Arg Cys Asn Leu Asp Trp Leu Thr Ile Glu Thr
 100 105 110
 Tyr Lys Asn Ile Glu Ser Tyr Arg Ala Cys Gly Ser Thr Ile Pro Pro
 115 120 125
 Pro Tyr Ile Ser Ser Gln Asp His Ile Trp Ile Arg Phe His Ser Asp
 130 135 140
 Asp Asn Ile Ser Arg Lys Gly Phe Arg Leu Ala Tyr Phe Ser Gly Lys
 145 150 155 160
 Ser Glu Glu Pro Asn Cys Ala Cys Asp Gln Phe Arg Cys Gly Asn Gly
 165 170 175
 Lys Cys Ile Pro Glu Ala Trp Lys Cys Asn Asn Met Asp Glu Cys Gly
 180 185 190
 Asp Arg Ser Asp Glu Glu Ile Cys Ala Lys Glu Ala Asn Pro Pro Thr
 195 200 205
 Ala Ala Ala Phe Gln Pro Cys Ala Tyr Asn Gln Phe Gln Cys Leu Ser
 210 215 220
 Arg Phe Thr Lys Val Tyr Thr Cys Leu Pro Glu Ser Leu Lys Cys Asp
 225 230 235 240
 Gly Asn Ile Asp Cys Leu Asp Leu Gly Asp Glu Ile Asp Cys Asp Val
 245 250 255
 Pro Thr Cys Gly Gln Trp Leu Lys Tyr Phe Tyr Gly Thr Phe Asn Ser
 260 265 270
 Pro Asn Tyr Pro Asp Phe Tyr Pro Pro Gly Ser Asn Cys Thr Trp Leu
 275 280 285
 Ile Asp Thr Gly Asp His Arg Lys Val Ile Leu Arg Phe Thr Asp Phe
 290 295 300
 Lys Leu Asp Gly Thr Gly Tyr Gly Asp Tyr Val Lys Ile Tyr Asp Gly
 305 310 315 320
 Leu Glu Glu Asn Pro His Lys Leu Leu Arg Val Leu Thr Ala Phe Asp
 325 330 335
 Ser His Ala Pro Leu Thr Val Val Ser Ser Gly Gln Ile Arg Val
 340 345 350
 His Phe Cys Ala Asp Lys Val Asn Ala Ala Arg Gly Phe Asn Ala Thr
 355 360 365
 Tyr Gln Val Asp Gly Phe Cys Leu Pro Trp Glu Ile Pro Cys Gly Gly
 370 375 380
 Asn Trp Gly Cys Tyr Thr Glu Gln Gln Arg Cys Asp Gly Tyr Trp His
 385 390 395 400
 Cys Pro Asn Gly Arg Asp Glu Thr Asn Cys Thr Met Cys Gln Lys Glu

405 410 415
 Glu Phe Pro Cys Ser Arg Asn Gly Val Cys Tyr Pro Arg Ser Asp Arg
 420 425 430
 Cys Asn Tyr Gln Asn His Cys Pro Asn Gly Ser Asp Glu Lys Asn Cys
 435 440 445
 Phe Phe Cys Gln Pro Gly Asn Phe His Cys Lys Asn Asn Arg Cys Val
 450 455 460
 Phe Glu Ser Trp Val Cys Asp Ser Gln Asp Asp Cys Gly Asp Gly Ser
 465 470 475 480
 Asp Glu Glu Asn Cys Pro Val Ile Val Pro Thr Arg Val Ile Thr Ala
 485 490 495
 Ala Val Ile Gly Ser Leu Ile Cys Gly Leu Leu Leu Val Ile Ala Leu
 500 505 510
 Gly Cys Thr Cys Lys Leu Tyr Ser Leu Arg Met Phe Glu Arg Arg Ser
 515 520 525
 Phe Glu Thr Gln Leu Ser Arg Val Glu Ala Glu Leu Leu Arg Arg Glu
 530 535 540
 Ala Pro Pro Ser Tyr Gly Gln Leu Ile Ala Gln Gly Leu Ile Pro Pro
 545 550 555 560
 Val Glu Asp Phe Pro Val Cys Ser Pro Asn Gln Ala Ser Val Leu Glu
 565 570 575
 Asn Leu Arg Leu Ala Val Arg Ser Gln Leu Gly Phe Thr Ser Val Arg
 580 585 590
 Leu Pro Met Ala Gly Arg Ser Ser Asn Ile Trp Asn Arg Ile Phe Asn
 595 600 605
 Phe Ala Arg Ser Arg His Ser Gly Ser Leu Ala Leu Val Ser Ala Asp
 610 615 620
 Gly Asp Glu Val Val Pro Ser Gln Ser Thr Ser Arg Glu Pro Glu Arg
 625 630 635 640
 Asn His Thr His Arg Ser Leu Phe Ser Val Glu Ser Asp Asp Thr Asp
 645 650 655
 Thr Glu Asn Glu Arg Arg Asp Met Ala Gly Ala Ser Gly Gly Val Ala
 660 665 670
 Ala Pro Leu Pro Gln Lys Val Pro Pro Thr Thr Ala Val Glu Ala Thr
 675 680 685
 Val Gly Ala Cys Ala Ser Ser Ser Thr Gln Ser Thr Arg Gly Gly His
 690 695 700
 Ala Asp Asn Gly Arg Asp Val Thr Ser Val Glu Pro Pro Ser Val Ser
 705 710 715 720
 Pro Ala Arg His Gln Leu Thr Ser Ala Leu Ser Arg Met Thr Gln Gly
 725 730 735
 Leu Arg Trp Val Arg Phe Thr Leu Gly Arg Ser Ser Ser Leu Ser Gln
 740 745 750
 Asn Gln Ser Pro Leu Arg Gln Leu Asp Asn Gly Val Ser Gly Arg Glu
 755 760 765
 Asp Asp Asp Asp Val Glu Met Leu Ile Pro Ile Ser Asp Gly Ser Ser
 770 775 780
 Asp Phe Asp Val Asn Asp Cys Ser Arg Pro Leu Leu Asp Leu Ala Ser
 785 790 795 800
 Asp Gln Gly Gln Gly Leu Arg Gln Pro Tyr Asn Ala Thr Asn Pro Gly
 805 810 815
 Val Arg Pro Ser Asn Arg Asp Gly Pro Cys Glu Arg Cys Gly Ile Val
 820 825 830
 His Thr Ala Gln Ile Pro Asp Thr Cys Leu Glu Val Thr Leu Lys Asn
 835 840 845
 Glu Thr Ser Asp Asp Glu Ala Leu Leu Leu Cys *
 850 855 859

<210> 896

<211> 54

<212> PRT

<213> Homo sapiens

<400> 896

```

Met Ser Asn Arg Thr Arg Ile Arg Thr His Val Asn Leu Cys Cys Phe
 1          5          10          15
Cys Arg Tyr Thr Thr Pro Lys Met Ser Phe Ser Ser Ala Cys Val Ser
          20          25          30
Leu Cys Leu Met Leu Leu Phe Cys Ser Pro Pro Leu Leu Leu Leu
          35          40          45
Leu Ser Ser Phe Val *
          50          53

```

<210> 897

<211> 367

<212> PRT

<213> Homo sapiens

<400> 897

```

Met Ala Ser Met Ala Ala Val Leu Thr Trp Ala Leu Ala Leu Leu Ser
 1          5          10          15
Ala Phe Ser Ala Thr Gln Ala Arg Lys Gly Phe Trp Asp Tyr Phe Ser
          20          25          30
Gln Thr Ser Gly Asp Lys Gly Arg Val Glu Gln Ile His Gln Gln Lys
          35          40          45
Met Ala Arg Glu Pro Ala Thr Leu Lys Asp Ser Leu Glu Gln Asp Leu
          50          55          60
Asn Asn Met Asn Lys Phe Leu Glu Lys Leu Arg Pro Leu Ser Gly Ser
          65          70          75          80
Glu Ala Pro Arg Leu Pro Gln Asp Pro Val Gly Met Arg Arg Gln Leu
          85          90          95
Gln Glu Glu Leu Glu Glu Val Lys Ala Arg Leu Gln Pro Tyr Met Ala
          100          105          110
Glu Ala His Glu Leu Val Gly Trp Asn Leu Glu Gly Leu Arg Gln Gln
          115          120          125
Leu Lys Pro Tyr Thr Met Asp Leu Met Glu Gln Val Ala Leu Arg Val
          130          135          140
Gln Glu Leu Gln Glu Gln Leu Arg Val Val Gly Glu Asp Thr Lys Ala
          145          150          155          160
Gln Leu Leu Gly Gly Val Asp Glu Ala Trp Ala Leu Leu Gln Gly Leu
          165          170          175
Gln Ser Arg Val Val His His Thr Gly Arg Phe Lys Glu Leu Phe His
          180          185          190
Pro Tyr Ala Glu Ser Leu Val Ser Gly Ile Gly Arg His Val Gln Glu
          195          200          205
Leu His Arg Ser Val Ala Pro His Ala Pro Ala Ser Pro Ala Arg Leu
          210          215          220
Ser Arg Cys Val Gln Val Leu Ser Arg Lys Leu Thr Leu Lys Ala Lys
          225          230          235          240
Ala Leu His Ala Arg Ile Gln Gln Asn Leu Asp Gln Leu Arg Glu Glu
          245          250          255
Leu Ser Arg Ala Phe Ala Gly Thr Gly Thr Glu Glu Gly Ala Gly Pro
          260          265          270
Asp Pro Gln Met Leu Ser Glu Glu Val Arg Gln Arg Leu Gln Ala Phe
          275          280          285
Arg Gln Asp Thr Tyr Leu Gln Ile Ala Ala Phe Thr Arg Ala Ile Asp
          290          295          300
Gln Glu Thr Glu Glu Val Gln Gln Gln Leu Ala Pro Pro Pro Pro Gly
          305          310          315          320
His Ser Ala Phe Ala Pro Glu Phe Gln Gln Thr Asp Ser Gly Lys Val
          325          330          335
Leu Ser Lys Leu Gln Ala Arg Leu Asp Asp Leu Trp Glu Asp Ile Thr

```

	340		345		350	
His	Ser	Leu	His	Asp	Gln	Gly
	355		360		365	366

<210> 898
 <211> 48
 <212> PRT
 <213> Homo sapiens

<400> 898
 Met Phe Ile Gly Leu Gly Ile Ser Phe Leu Asn Cys Pro Ser Leu Phe
 1 5 10 15
 Ala His Phe Ile Leu Phe Cys Pro Leu Pro Leu Phe Gly Ile Phe Ile
 20 25 30
 Ser Tyr Trp Phe Val Arg Leu Leu Ser Ile Asn Arg Gly Trp Lys *
 35 40 45 47

<210> 899
 <211> 368
 <212> PRT
 <213> Homo sapiens

<400> 899
 Met Glu Phe Gly Leu Ser Trp Leu Phe Leu Val Ala Ile Leu Lys Gly
 1 5 10 15
 Val Gln Cys Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln
 20 25 30
 Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe
 35 40 45
 Ser Ser Tyr Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu
 50 55 60
 Glu Trp Val Ser Gly Phe Thr Gly Ser Gly Gly Ser Gly Gly Ser Thr
 65 70 75 80
 Tyr Tyr Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn
 85 90 95
 Ser Lys Asn Thr Leu Phe Leu Gln Met Asn Ser Leu Arg Ala Glu Asp
 100 105 110
 Thr Ala Val Tyr Tyr Cys Ala Lys Gly Leu Leu Pro Pro Arg Trp Ala
 115 120 125
 Tyr Arg Val Tyr Glu Asp Ser Gly Ile Phe Phe Asp Tyr Trp Gly Gln
 130 135 140
 Gly Thr Leu Val Thr Val Ser Ser Ser Asp Ile Gln Met Thr Gln Ser
 145 150 155 160
 Pro Ser Thr Leu Ser Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys
 165 170 175
 Arg Ala Ser Gln Ser Ile Ser Ser Trp Leu Ala Trp Tyr Gln Gln Lys
 180 185 190
 Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Lys Ala Ser Ser Leu Gln
 195 200 205
 Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe
 210 215 220
 Thr Leu Thr Ile Ser Ser Leu Gln Pro Asp Asp Phe Ala Thr Tyr Tyr
 225 230 235 240
 Cys Gln Gln Leu Ser Thr Tyr Val Trp Thr Phe Gly Gln Gly Thr Lys
 245 250 255
 Val Asp Ile Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro
 260 265 270
 Pro Ser Asp Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu

```

      275              280              285
Leu Asn Asn Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp
      290              295              300
Asn Ala Leu Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp
305              310              315              320
Ser Lys Asp Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys
      325              330              335
Ala Asp Tyr Glu Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln
      340              345              350
Gly Leu Ser Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys *
      355              360              365              367

```

```

<210> 900
<211> 56
<212> PRT
<213> Homo sapiens

```

```

      <400> 900
Met Leu Cys Gly Asn Thr Gln Leu Leu Phe Thr Val Ala Ile Ile Leu
  1              5              10              15
Leu Tyr Val Thr Cys Leu Leu His Trp Thr Phe Leu His Leu Glu Trp
      20              25              30
Arg Val Ser Glu Gly Arg His His Asp Pro Leu Ser Thr Thr Leu Met
      35              40              45
His Glu Lys Met Asn Asp Asn *
  50              55

```

```

<210> 901
<211> 213
<212> PRT
<213> Homo sapiens

```

```

      <400> 901
Met Tyr Arg Leu Ser Ser Ser Met Leu Leu Arg Ala Leu Ala Gln Ala
  1              5              10              15
Met Arg Thr Gly His Leu Ile Gly Gln Ser Leu His Ser Ser Ala Val
      20              25              30
Ala Ala Thr Tyr Lys Tyr Val Asn Lys Lys Glu Gln Glu Ser Glu Val
      35              40              45
Asp Met Lys Ser Glu Thr Asp Asn Ala Ala Arg Ile Leu Met Trp Thr
  50              55              60
Glu Leu Ile Arg Gly Leu Gly Met Thr Leu Arg Tyr Leu Phe Arg Glu
  65              70              75              80
Pro Ala Thr Ile Asn Tyr Pro Phe Glu Lys Gly Pro Leu Ser Pro Arg
      85              90              95
Phe Arg Gly Glu His Ala Leu Arg Arg Tyr Pro Ser Gly Glu Glu Arg
      100              105              110
Cys Ile Ala Cys Lys Leu Cys Glu Ala Ile Cys Pro Ala Gln Ala Ile
      115              120              125
Thr Ile Glu Ala Glu Pro Arg Ala Asp Gly Ser Arg Arg Thr Thr Arg
      130              135              140
Tyr Asp Ile Asp Met Thr Lys Cys Ile Tyr Cys Gly Phe Cys Gln Glu
  145              150              155              160
Ala Cys Pro Val Asp Ala Ile Val Glu Gly Pro Asn Phe Glu Phe Ser
      165              170              175
Thr Glu Thr His Glu Glu Leu Leu Tyr Asn Lys Glu Lys Leu Leu Asn
      180              185              190
Asn Gly Asp Lys Trp Glu Ala Glu Ile Ala Ala Asn Ile Gln Ala Asp

```

		195			200			205
Tyr	Leu	Tyr	Arg	*				
	210		212					

```
<210> 902
<211> 70
<212> PRT
<213> Homo sapiens
```

```

<400> 902
Met Ile Glu Leu Ala Phe Ala Ser Phe Leu Lys Cys Ala Ser Phe Ser
 1          5          10          15
Leu Leu Ile Leu Phe Ser Phe Ser Phe Pro Leu Trp Phe Phe Leu Ser
          20          25          30
Cys Phe Ala Cys Ser Tyr Ser Phe Ser Cys Leu Leu Ser Arg Ile Ser
          35          40          45
Ile Leu Ser Pro Phe Cys His Leu Leu Pro Arg Gln Ser His Asp Leu
          50          55          60
Cys Thr Asn Asp Leu *
65          69

```

```
<210> 903
<211> 63
<212> PRT
<213> Homo sapiens
```

<400> 903															
Met	Ser	Val	Leu	Ile	Trp	Cys	Leu	Ile	Phe	Phe	Pro	Leu	Glu	Tyr	Ser
1				5					10					15	
Arg	Pro	Lys	Arg	Gly	Leu	Lys	Val	Asp	Asn	Val	Cys	Phe	Ser	Thr	Val
			20					25					30		
Ala	Leu	Ser	Thr	Gly	Ser	Arg	Ile	Ser	Asn	Trp	Ser	Asn	Cys	Glu	Thr
		35					40					45			
Cys	Leu	Leu	Ala	Glu	Met	Phe	Phe	Leu	Asp	Leu	Gly	Phe	Ser	*	
	50					55					60		62		

```
<210> 904
<211> 319
<212> PRT
<213> Homo sapiens
```

	<400> 904																
Met	Ala	Ala	Ala	Ala	Val	Ser	Gly	Ala	Leu	Gly	Arg	Ala	Gly	Trp	Arg		
1				5					10					15			
Leu	Leu	Gln	Leu	Arg	Cys	Leu	Pro	Val	Ala	Arg	Cys	Arg	Gln	Ala	Leu		
			20					25					30				
Val	Pro	Arg	Ala	Phe	His	Ala	Ser	Ala	Val	Gly	Leu	Arg	Ser	Ser	Asp		
			35				40					45					
Glu	Gln	Lys	Gln	Gln	Pro	Pro	Asn	Ser	Phe	Ser	Gln	Gln	His	Ser	Glu		
	50					55					60						
Thr	Gln	Gly	Ala	Glu	Lys	Pro	Asp	Pro	Glu	Ser	Ser	His	Ser	Pro	Pro		
65					70					75				80			
Arg	Tyr	Thr	Asp	Gln	Gly	Gly	Glu	Glu	Glu	Glu	Asp	Tyr	Glu	Ser	Glu		
				85					90				95				
Glu	Gln	Leu	Gln	His	Arg	Ile	Leu	Thr	Ala	Ala	Leu	Glu	Phe	Val	Pro		

```

100      105      110
Ala His Gly Trp Thr Ala Glu Ala Ile Ala Glu Gly Ala Gln Ser Leu
115      120      125
Gly Leu Ser Ser Ala Ala Ala Ser Met Phe Gly Lys Asp Gly Ser Glu
130      135      140
Leu Ile Leu His Phe Val Thr Gln Cys Asn Thr Arg Leu Thr Arg Val
145      150      155      160
Leu Glu Glu Glu Gln Lys Leu Val Gln Leu Gly Gln Ala Glu Lys Arg
165      170      175
Lys Thr Asp Gln Phe Leu Arg Asp Ala Val Glu Thr Arg Leu Arg Met
180      185      190
Leu Ile Pro Tyr Ile Glu His Trp Pro Arg Ala Leu Ser Ile Leu Met
195      200      205
Leu Pro His Asn Ile Pro Ser Ser Leu Ser Leu Leu Thr Ser Met Val
210      215      220
Asp Asp Met Trp His Tyr Ala Gly Asp Gln Ser Thr Asp Phe Asn Trp
225      230      235      240
Tyr Thr Arg Arg Ala Met Leu Ala Ala Ile Tyr Asn Thr Thr Glu Leu
245      250      255
Val Met Met Gln Asp Ser Ser Pro Asp Phe Glu Asp Thr Trp Arg Phe
260      265      270
Leu Glu Asn Arg Val Asn Asp Ala Met Asn Met Gly His Thr Ala Lys
275      280      285
Gln Val Lys Ser Thr Gly Glu Ala Leu Val Gln Gly Leu Met Gly Ala
290      295      300
Ala Val Thr Leu Lys Asn Leu Thr Gly Leu Asn Gln Arg Arg *
305      310      315      318

```

<210> 905
 <211> 57
 <212> PRT
 <213> Homo sapiens

```

<400> 905
Met Gly His Leu Leu Cys Val Trp Gly Phe Thr Tyr Ile Leu Pro Cys
1      5      10      15
Ile Ser Leu Arg His Ser Pro Leu Gln Pro Pro Gly Trp Glu Gly Phe
20      25      30
Cys Arg Asn Val Ser Phe Pro Leu Leu Arg Ala Ser Leu Ala Pro His
35      40      45
His Arg Arg Lys Asp Gly Phe Ile *
50      55      56

```

<210> 906
 <211> 84
 <212> PRT
 <213> Homo sapiens

```

<400> 906
Met His Val Leu Ile Arg Thr Pro Cys Ser Leu Ile Leu Cys Leu Ala
1      5      10      15
Asn Ser Ser His Ala Ser Leu Pro Gly Phe Ser Ala Ser Ser Phe Leu
20      25      30
Phe Lys Glu Ser Cys Arg Leu Leu Asn Ser Ser Phe Leu Leu His
35      40      45
Gly Leu Glu Ile Leu Ser Gly Ala Ile Ala Gly Gln Cys Asn Ser Phe
50      55      60
Cys Leu Phe Ser Ile Ser Gln Gly Ser Leu Ser Phe Asn Ala Ser Cys

```

65
Pro Leu Pro *

70

75

80

<210> 907
<211> 72
<212> PRT
<213> Homo sapiens

<400> 907
Met Thr Leu Leu Trp Pro His Thr Ala Ala Cys Leu Ser Val Thr Leu
1 5 10 15
Tyr Leu Pro Ala Ser Ser Ala Lys Tyr Phe Lys Arg Gly Glu Gly Arg
20 25 30
Glu Lys Phe Ile Thr Asn Pro Thr Thr Arg Lys Lys Lys Leu Phe Trp
35 40 45
Arg Arg Gly Lys Arg Asn His Asp Gln Ala Phe Thr Gly Ile Pro Asp
50 55 60
Gln Val Ser Leu Phe Pro Phe *
65 70 71

<210> 908
<211> 98
<212> PRT
<213> Homo sapiens

<400> 908
Met Tyr Leu His Val Leu Val Leu Ser His Arg Ile Leu Leu Ser Pro
1 5 10 15
Tyr Ile Pro Ser Phe Lys Ser Val Pro Pro Val Phe Ser Ile Leu
20 25 30
Gln Met Ala Pro Met Ser Ile Leu Asp Ile Asp His Pro Arg Ser Leu
35 40 45
Gly Gly Asp Ser Ser His Phe Phe Ser Ser Val Ala Gln Ala Leu Thr
50 55 60
Phe Cys Pro Phe Ala Leu Arg Pro Phe Asn Asn Tyr Ser Leu Gln Arg
65 70 75 80
Pro Val Phe Gln Lys Ala Pro Ala Phe His His Phe Leu Val Lys Lys
85 90 95
Phe *
97

<210> 909
<211> 91
<212> PRT
<213> Homo sapiens

<400> 909
Met Phe Leu Val Phe Cys Asn Ile Ile Thr Val Ile Thr Met Thr Ser
1 5 10 15
Leu Phe Leu Ile Leu Leu Ser Cys Ile Phe Ile Leu Ile Thr Cys Cys
20 25 30
Tyr Lys Cys Arg Tyr Ile Ser Phe Thr Phe Ser Val Thr Pro
35 40 45
Ser Gly Phe Phe Val Ser Ile Leu Gln Tyr Leu Ala His Ile Leu Leu


```

      50              55              60
Leu Ile Thr Leu Gln Phe His Phe Arg Val Cys Tyr Val Asn Ile Ile
 65              70              75              80
Thr Leu Ile Pro Leu Ala Gln Ile Phe Leu *
              85              90

```

<210> 910
 <211> 59
 <212> PRT
 <213> Homo sapiens

```

      <400> 910
Met Gln Leu Trp Gly Phe Leu Asn Leu Asn Phe Pro Cys Ser Ser Leu
 1              5              10              15
Cys Phe Trp Ala Leu Gly Ser Arg Gly Phe Thr Leu Val Leu Ala Val
              20              25              30
Thr Pro Ile Asn Ser Thr Gly Trp Ala Ala His Leu Pro Gln His Val
              35              40              45
Lys Met Arg Leu Phe Ser Ile Gln Leu Phe *
              50              55              58

```

<210> 911
 <211> 73
 <212> PRT
 <213> Homo sapiens

```

      <400> 911
Met Leu Met Val Leu Lys Leu Val Ile Cys Ser Ile Phe Ile Gly Lys
 1              5              10              15
Glu Gly His Phe Val Ile Ser Tyr Leu Pro Ser Phe Ser Leu Asn Ile
              20              25              30
Gln Asp Thr Leu Lys Ser Val His Gln Pro Cys Ser Ala Leu Ser Gly
              35              40              45
Tyr Asn Met Pro Glu Lys Pro Glu Glu Cys Ser Ile Lys Glu Arg His
              50              55              60
Pro Tyr Ser Gln Arg Leu Phe Leu Glu
 65              70              73

```

<210> 912
 <211> 97
 <212> PRT
 <213> Homo sapiens

```

      <400> 912
Met Gly Ile Ser Cys Lys Leu Leu Leu Thr Arg Val Cys Tyr Leu
 1              5              10              15
Ile Thr Pro Leu Asp Leu Glu Arg Phe Pro Phe Pro Asn Thr Glu Gln
              20              25              30
Val Thr Phe Pro Glu Arg Arg Val Ser Val Phe Leu Leu Pro Leu Ser
              35              40              45
Trp Cys Leu Asp Thr Arg Leu Pro Arg Glu Pro Gly Cys Arg Cys Arg
              50              55              60
His Ser Ser Pro Gln Asp Val Val Gly Gly Ser His Leu Val Thr Thr
 65              70              75              80
Thr Leu Leu Ser Leu Pro Ala Arg Glu Phe Trp Thr Ser Cys Ile Leu

```

★

<210> 913

<211> 46

<212> PRT

<213> Homo sapiens

<400> 913

Met	Ile	Leu	Phe	His	Cys	Glu	Lys	Leu	Tyr	Ala	Leu	Arg	Ser	Phe	Asp
1				5					10					15	
Phe	Trp	Phe	Met	Leu	Glu	Leu	Leu	Ser	Thr	Trp	Pro	Arg	Ala	Leu	Gly
			20					25					30		
Leu	Leu	Cys	Pro	Gly	Leu	Ala	Ile	Glu	Ala	His	Glu	Gly	*		
		35					40					45			

<210> 914

<211> 79

<212> PRT

<213> Homo sapiens

<400> 914

Met	Lys	Thr	Leu	Lys	Ile	Phe	Thr	Tyr	Tyr	Phe	Leu	Ser	Leu	Ser	Asn
1				5					10					15	
Ile	Phe	Ile	Leu	Thr	Ile	Gly	Leu	Thr	Cys	Ala	Ser	Gly	Pro	Leu	Asp
			20					25					30		
Phe	Thr	Pro	Val	Phe	Leu	Leu	Gly	Lys	Gly	Ser	Leu	Lys	Cys	Lys	Tyr
		35					40					45			
Gly	Pro	Val	Ala	His	Leu	Pro	Pro	Glu	Ala	Leu	Glu	Ser	Gly	Pro	Gln
	50					55					60				
Ile	Pro	Ser	Gly	Cys	Asn	Trp	Lys	Glu	Ile	Pro	Thr	Ser	Ser	*	
65					70					75			78		

<210> 915

<211> 87

<212> PRT

<213> Homo sapiens

<400> 915

Met	Trp	Leu	Phe	Cys	Ala	Trp	Val	Ser	Thr	Trp	Gly	Gln	Gly	Cys	Pro
1				5					10					15	
Pro	Gly	Arg	Gly	Gln	Met	Ile	Tyr	Ala	Ser	His	His	Leu	Ser	Val	His
			20					25					30		
Thr	Thr	Ser	Pro	His	His	Trp	Leu	Ser	Ala	Trp	Ala	Leu	Gln	Gly	Gly
		35					40					45			
Ala	Val	Phe	Pro	Glu	Leu	Ala	His	Gly	Ala	Ser	Ser	Ala	Ser	Ser	Gly
	50					55					60				
Gln	Ala	Asp	Asp	Ser	Thr	Cys	Ser	Phe	Cys	Ser	Pro	Trp	Arg	Val	Ser
65					70					75					80
Ala	Glu	His	Lys	Ser	Leu	Thr									
				85		87									

<210> 916
 <211> 369
 <212> PRT
 <213> Homo sapiens

<400> 916
 Met Trp Pro Ala Leu Leu Leu Ser His Leu Leu Pro Leu Trp Pro Leu
 1 5 10 15
 Leu Leu Leu Pro Leu Pro Pro Pro Ala Gln Asp Ser Ser Ser Ser Pro
 20 25 30
 Arg Thr Pro Pro Ala Pro Ala Arg Pro Pro Cys Ala Arg Gly Gly Pro
 35 40 45
 Ser Ala Pro Arg His Val Cys Val Trp Glu Arg Ala Pro Pro Pro Ser
 50 55 60
 Arg Ser Pro Arg Val Pro Arg Ser Arg Arg Gln Val Leu Pro Gly Thr
 65 70 75 80
 Ala Pro Pro Ala Thr Pro Ser Gly Phe Glu Glu Gly Pro Pro Ser Ser
 85 90 95
 Gln Tyr Pro Trp Ala Ile Val Trp Gly Pro Thr Val Ser Arg Glu Asp
 100 105 110
 Gly Gly Asp Pro Asn Ser Ala Asn Pro Gly Phe Leu Asp Tyr Gly Phe
 115 120 125
 Ala Ala Pro His Gly Leu Ala Thr Pro His Pro Asn Ser Asp Ser Met
 130 135 140
 Arg Gly Asp Gly Asp Gly Leu Ile Leu Gly Glu Ala Pro Ala Thr Leu
 145 150 155 160
 Arg Pro Phe Leu Phe Gly Gly Arg Gly Glu Gly Val Asp Pro Gln Leu
 165 170 175
 Tyr Val Thr Ile Thr Ile Ser Ile Ile Ile Val Leu Val Ala Thr Gly
 180 185 190
 Ile Ile Phe Lys Phe Cys Trp Asp Arg Ser Gln Lys Arg Arg Arg Pro
 195 200 205
 Ser Gly Gln Gln Gly Ala Leu Arg Gln Glu Glu Ser Gln Gln Pro Leu
 210 215 220
 Thr Asp Leu Ser Pro Ala Gly Val Thr Val Leu Gly Ala Phe Gly Asp
 225 230 235 240
 Ser Pro Thr Pro Thr Pro Asp His Glu Glu Pro Arg Gly Gly Pro Arg
 245 250 255
 Pro Gly Met Pro His Pro Lys Gly Ala Pro Ala Phe Gln Leu Asn Arg
 260 265 270
 Ser Leu Ser Gly Gln Arg Phe Leu His Thr Leu Pro Leu Met Cys Val
 275 280 285
 Ser Arg Pro Asp Val Val Val Val Cys Gly Val Leu Thr Leu Ser Leu
 290 295 300
 Met Asn Thr His Pro Pro Arg Phe Arg Ser Pro Cys Met Leu Leu Gln
 305 310 315 320
 Arg Trp Val Gly Gly Glu Leu Gly Ala Pro Trp Ala Leu Ile Gly His
 325 330 335
 Gly Leu Val Pro Phe His Thr Ile Cys Phe Ser Val Ser Pro Ser Tyr
 340 345 350
 Ser Lys Asp Ala Gly Ile Thr Leu Arg Ala Pro Pro Trp Glu Met Gly
 355 360 365 368
 *

<210> 917
 <211> 345
 <212> PRT
 <213> Homo sapiens

<400> 917

```

Met Asp Phe Leu Val Leu Phe Leu Phe Tyr Leu Ala Ser Val Leu Met
 1          5          10          15
Gly Leu Val Leu Ile Cys Val Cys Ser Lys Thr His Ser Leu Lys Gly
          20          25          30
Leu Ala Arg Gly Gly Ala Gln Ile Phe Ser Cys Ile Ile Pro Glu Cys
          35          40          45
Leu Gln Arg Ala Met His Gly Leu Leu His Tyr Leu Phe His Thr Arg
          50          55          60
Asn His Thr Phe Ile Val Leu His Leu Val Leu Gln Gly Met Val Tyr
          65          70          75          80
Thr Glu Tyr Thr Trp Glu Val Phe Gly Tyr Cys Gln Glu Leu Glu Leu
          85          90          95
Ser Leu His Tyr Leu Leu Leu Pro Tyr Leu Leu Leu Gly Val Asn Leu
          100          105          110
Phe Phe Phe Thr Leu Thr Cys Gly Thr Asn Pro Gly Ile Ile Thr Lys
          115          120          125
Ala Asn Glu Leu Leu Phe Leu His Val Tyr Glu Phe Asp Glu Val Met
          130          135          140
Phe Pro Lys Asn Val Arg Cys Ser Thr Cys Asp Leu Arg Lys Pro Ala
          145          150          155          160
Arg Ser Lys His Cys Ser Val Cys Asn Trp Cys Val His Arg Phe Asp
          165          170          175
His His Cys Val Trp Val Asn Asn Cys Ile Gly Ala Trp Asn Ile Arg
          180          185          190
Tyr Phe Leu Ile Tyr Val Leu Thr Leu Thr Ala Ser Ala Ala Thr Val
          195          200          205
Ala Ile Val Ser Thr Thr Phe Leu Val His Leu Val Val Met Ser Asp
          210          215          220
Leu Tyr Gln Glu Thr Tyr Ile Asp Asp Leu Gly His Leu His Val Met
          225          230          235          240
Asp Thr Val Phe Leu Ile Gln Tyr Leu Phe Leu Thr Phe Pro Arg Ile
          245          250          255
Val Phe Met Leu Gly Phe Val Val Val Leu Ser Phe Leu Leu Gly Gly
          260          265          270
Tyr Leu Leu Phe Val Leu Tyr Leu Ala Ala Thr Asn Gln Thr Thr Asn
          275          280          285
Glu Trp Tyr Arg Gly Asp Trp Ala Trp Cys Gln Arg Cys Pro Leu Val
          290          295          300
Ala Trp Pro Pro Ser Ala Glu Pro Gln Val His Arg Asn Ile His Ser
          305          310          315          320
His Gly Leu Arg Ser Asn Leu Gln Glu Ile Phe Leu Pro Ala Phe Pro
          325          330          335
Cys His Glu Arg Lys Lys Gln Glu *
          340          344

```

<210> 918

<211> 96

<212> PRT

<213> Homo sapiens

<400> 918

```

Met Glu Leu Val Leu Val Phe Leu Cys Ser Leu Leu Ala Pro Met Val
 1          5          10          15
Leu Ala Ser Ala Ala Glu Lys Glu Lys Glu Met Asp Pro Phe His Tyr
          20          25          30
Asp Tyr Gln Thr Leu Arg Ile Gly Gly Leu Val Phe Ala Val Val Leu
          35          40          45
Phe Ser Val Gly Ile Leu Leu Ile Leu Ser Arg Arg Cys Lys Cys Ser
          50          55          60
Phe Asn Gln Lys Pro Arg Ala Pro Gly Asp Glu Glu Ala Gln Val Glu

```

65
Asn Leu Ile Thr Ala Asn Ala Thr Glu Pro Gln Lys Ala Glu Asn 80
85 90 95 *

```
<210> 919
<211> 51
<212> PRT
<213> Homo sapiens
```

[illegible]

```
<210> 920
<211> 99
<212> PRT
<213> Homo sapiens
```

[illegible]

```
<210> 921
<211> 99
<212> PRT
<213> Homo sapiens
```

<400> 921

Met	Arg	Ala	Val	Leu	Leu	Gln	His	Leu	Phe	Ile	Leu	Leu	Asp	Arg	Gln
1				5					10					15	
Thr	Thr	Lys	Lys	Asn	Ser	Asn	Leu	Asp	Ile	Gly	His	Val	Phe	Arg	Glu
			20					25					30		
Ala	Leu	Ile	Phe	Leu	Ala	Asp	Leu	Lys	Ser	Gln	Leu	Pro	Ser	Val	Thr
		35					40					45			
His	His	Gln	Tyr	Arg	His	Leu	Pro	Ser	Asn	Trp	Leu	Gln	Leu	Leu	Gln
	50					55					60				
Cys	Gly	Gln	Asp	Lys	His	Cys	Cys	Leu	Ser	His	Ala	Arg	Leu	Gly	Leu

65 70 75 80
 Ala Gln Asp Ile His Ser Gln Asn Gly Leu Arg Asp Ala Leu Met Leu
 85 90 95
 Asp Phe *
 98

<210> 922
 <211> 353
 <212> PRT
 <213> Homo sapiens

<400> 922
 Met Arg Ser Leu Gly Ala Leu Leu Leu Leu Leu Ser Ala Cys Leu Ala
 1 5 10 15
 Val Ser Ala Gly Pro Val Pro Thr Pro Pro Asp Asn Ile Gln Val Gln
 20 25 30
 Glu Asn Phe Asn Ile Ser Arg Ile Tyr Gly Lys Trp Tyr Asn Leu Ala
 35 40 45
 Ile Gly Ser Thr Cys Pro Trp Leu Lys Lys Ile Met Asp Arg Met Thr
 50 55 60
 Val Ser Thr Leu Val Leu Gly Glu Gly Ala Thr Glu Ala Glu Ile Ser
 65 70 75 80
 Met Thr Ser Thr Arg Trp Arg Lys Gly Val Cys Glu Glu Thr Ser Gly
 85 90 95
 Ala Tyr Glu Lys Thr Asp Thr Asp Gly Lys Phe Leu Tyr His Lys Ser
 100 105 110
 Lys Trp Asn Ile Thr Met Glu Ser Tyr Val Val His Thr Asn Tyr Asp
 115 120 125
 Glu Tyr Ala Ile Phe Leu Thr Lys Lys Phe Ser Arg His His Gly Pro
 130 135 140
 Thr Ile Thr Ala Lys Leu Tyr Gly Arg Ala Pro Gln Leu Arg Glu Thr
 145 150 155 160
 Leu Leu Gln Asp Phe Arg Val Val Ala Gln Gly Val Gly Ile Pro Glu
 165 170 175
 Asp Ser Ile Phe Thr Met Ala Asp Arg Gly Glu Cys Val Pro Gly Glu
 180 185 190
 Gln Glu Pro Glu Pro Ile Leu Ile Pro Arg Val Arg Arg Ala Val Leu
 195 200 205
 Pro Gln Glu Glu Glu Gly Ser Gly Gly Gly Gln Leu Val Thr Glu Val
 210 215 220
 Thr Lys Lys Glu Asp Ser Cys Gln Leu Gly Tyr Ser Ala Gly Pro Cys
 225 230 235 240
 Met Gly Met Thr Ser Arg Tyr Phe Tyr Asn Gly Thr Ser Met Ala Cys
 245 250 255
 Glu Thr Phe Gln Tyr Gly Gly Cys Met Gly Asn Gly Asn Asn Phe Val
 260 265 270
 Thr Glu Lys Glu Cys Leu Gln Thr Cys Arg Thr Val Ala Ala Cys Asn
 275 280 285
 Leu Pro Ile Val Arg Gly Pro Cys Arg Ala Phe Ile Gln Leu Trp Ala
 290 295 300
 Phe Asp Ala Val Lys Gly Lys Cys Val Leu Phe Pro Tyr Gly Gly Cys
 305 310 315 320
 Gln Gly Asn Gly Asn Lys Phe Tyr Ser Glu Lys Glu Cys Arg Glu Tyr
 325 330 335
 Cys Gly Val Pro Gly Asp Gly Asp Glu Glu Leu Leu Arg Phe Ser Asn
 340 345 350 352
 *

<210> 923
 <211> 457
 <212> PRT
 <213> Homo sapiens

<400> 923
 Met Phe Leu Leu Leu Pro Phe Asp Ser Leu Ile Val Asn Leu Leu Gly
 1 5 10 15
 Ile Ser Leu Thr Val Leu Phe Thr Leu Leu Val Phe Ile Ile Val
 20 25 30
 Pro Ala Ile Phe Gly Val Ser Phe Gly Ile Arg Lys Leu Tyr Met Lys
 35 40 45
 Ser Leu Leu Lys Ile Phe Ala Trp Ala Thr Leu Arg Met Glu Arg Gly
 50 55 60
 Ala Lys Glu Lys Asn His Gln Leu Tyr Lys Pro Tyr Thr Asn Gly Ile
 65 70 75 80
 Ile Ala Lys Asp Pro Thr Ser Leu Glu Glu Ile Lys Glu Ile Arg
 85 90 95
 Arg Ser Gly Ser Ser Lys Ala Leu Asp Asn Thr Pro Glu Phe Glu Leu
 100 105 110
 Ser Asp Ile Phe Tyr Phe Cys Arg Lys Gly Met Glu Thr Ile Met Asp
 115 120 125
 Asp Glu Val Thr Lys Arg Phe Ser Ala Glu Glu Leu Glu Ser Trp Asn
 130 135 140
 Leu Leu Ser Arg Thr Asn Tyr Asn Phe Gln Tyr Ile Ser Leu Arg Leu
 145 150 155 160
 Thr Val Leu Trp Gly Leu Gly Val Leu Ile Arg Tyr Cys Phe Leu Leu
 165 170 175
 Pro Leu Arg Ile Ala Leu Ala Phe Thr Gly Ile Ser Leu Leu Val Val
 180 185 190
 Gly Thr Thr Val Val Gly Tyr Leu Pro Asn Gly Arg Phe Lys Glu Phe
 195 200 205
 Met Ser Lys His Val His Leu Met Cys Tyr Arg Ile Cys Val Arg Ala
 210 215 220
 Leu Thr Ala Ile Ile Thr Tyr His Asp Arg Glu Asn Arg Pro Arg Asn
 225 230 235 240
 Gly Gly Ile Cys Val Ala Asn His Thr Ser Pro Ile Asp Val Ile Ile
 245 250 255
 Leu Ala Ser Asp Gly Tyr Tyr Ala Met Val Gly Gln Val His Gly Gly
 260 265 270
 Leu Met Gly Val Ile Gln Arg Ala Met Val Lys Ala Cys Pro His Val
 275 280 285
 Trp Phe Glu Arg Ser Glu Val Lys Asp Arg His Leu Val Ala Lys Arg
 290 295 300
 Leu Thr Glu His Val Gln Asp Lys Ser Lys Leu Pro Ile Leu Ile Phe
 305 310 315 320
 Pro Glu Gly Thr Cys Ile Asn Asn Thr Ser Val Met Met Phe Lys Lys
 325 330 335
 Gly Ser Phe Glu Ile Gly Ala Thr Val Tyr Pro Val Ala Ile Lys Tyr
 340 345 350
 Asp Pro Gln Phe Gly Asp Ala Phe Trp Asn Ser Ser Lys Tyr Gly Met
 355 360 365
 Val Thr Tyr Leu Leu Arg Met Met Thr Ser Trp Ala Ile Val Cys Ser
 370 375 380
 Val Trp Tyr Leu Pro Pro Met Thr Arg Glu Ala Asp Glu Asp Ala Val
 385 390 395 400
 Gln Phe Ala Asn Arg Val Lys Ser Ala Ile Ala Arg Gln Gly Gly Leu
 405 410 415
 Val Asp Leu Leu Trp Asp Gly Gly Leu Lys Arg Glu Lys Val Lys Asp
 420 425 430
 Thr Phe Lys Glu Glu Gln Gln Lys Leu Tyr Ser Lys Met Ile Val Gly
 435 440 445
 Asn His Lys Asp Arg Ser Arg Ser *

450

455 456

<210> 924
 <211> 468
 <212> PRT
 <213> Homo sapiens

<400> 924
 Met Leu Leu Leu Leu Leu Leu Pro Leu Leu Trp Gly Arg Glu Arg Val
 1 5 10 15
 Glu Gly Gln Lys Ser Asn Arg Lys Asp Tyr Ser Leu Thr Met Gln Ser
 20 25 30
 Ser Val Thr Val Gln Glu Gly Met Cys Val His Val Arg Cys Ser Phe
 35 40 45
 Ser Tyr Pro Val Asp Ser Gln Thr Asp Ser Asp Pro Val His Gly Tyr
 50 55 60
 Trp Phe Arg Ala Gly Asn Asp Ile Ser Trp Lys Ala Pro Val Ala Thr
 65 70 75 80
 Asn Asn Pro Ala Trp Ala Val Gln Glu Glu Thr Arg Asp Arg Phe His
 85 90 95
 Leu Leu Gly Asp Pro Gln Thr Lys Asn Cys Thr Leu Ser Ile Arg Asp
 100 105 110
 Ala Arg Met Ser Asp Ala Gly Arg Tyr Phe Phe Arg Met Glu Lys Gly
 115 120 125
 Asn Ile Lys Trp Asn Tyr Lys Tyr Asp Gln Leu Ser Val Asn Val Thr
 130 135 140
 Ala Leu Thr His Arg Pro Asn Ile Leu Ile Pro Gly Thr Leu Glu Ser
 145 150 155 160
 Gly Cys Phe Gln Asn Leu Thr Cys Ser Val Pro Trp Ala Cys Glu Gln
 165 170 175
 Gly Thr Pro Pro Met Ile Ser Trp Met Gly Thr Ser Val Ser Pro Leu
 180 185 190
 His Pro Ser Thr Thr Arg Ser Ser Val Leu Thr Leu Ile Pro Gln Pro
 195 200 205
 Gln His His Gly Thr Ser Leu Thr Cys Gln Val Thr Leu Pro Gly Ala
 210 215 220
 Gly Val Thr Thr Asn Arg Thr Ile Gln Leu Asn Val Ser Tyr Pro Pro
 225 230 235 240
 Gln Asn Leu Thr Val Thr Val Phe Gln Gly Glu Gly Thr Ala Ser Thr
 245 250 255
 Ala Leu Gly Asn Ser Ser Ser Leu Ser Val Leu Glu Gly Gln Ser Leu
 260 265 270
 Arg Leu Val Cys Ala Val Asp Ser Asn Pro Pro Ala Arg Leu Ser Trp
 275 280 285
 Thr Trp Arg Ser Leu Thr Leu Tyr Pro Ser Gln Pro Ser Asn Pro Leu
 290 295 300
 Val Leu Glu Leu Gln Val His Leu Gly Asp Glu Gly Glu Phe Thr Cys
 305 310 315 320
 Arg Ala Gln Asn Ser Leu Gly Ser Gln His Val Ser Leu Asn Leu Ser
 325 330 335
 Leu Gln Gln Glu Tyr Thr Gly Lys Met Arg Pro Val Ser Gly Val Leu
 340 345 350
 Leu Gly Ala Val Gly Gly Ala Gly Ala Thr Ala Leu Val Phe Leu Ser
 355 360 365
 Phe Cys Val Ile Phe Ile Val Arg Ser Cys Arg Lys Lys Ser Ala
 370 375 380
 Arg Pro Ala Ala Asp Val Gly Asp Ile Gly Met Lys Asp Ala Asn Thr
 385 390 395 400
 Ile Arg Gly Ser Ala Ser Gln Gly Asn Leu Thr Glu Ser Trp Ala Asp
 405 410 415
 Asp Asn Pro Arg His His Gly Leu Ala Ala His Ser Ser Gly Glu Glu


```
<210> 925
<211> 468
<212> PRT
<213> Homo sapiens
```

724

```

      370              375              380
Arg Pro Ala Ala Asp Val Gly Asp Ile Gly Met Lys Asp Ala Asn Thr
385              390              395              400
Ile Arg Gly Ser Ala Ser Gln Gly Asn Leu Thr Glu Ser Trp Ala Asp
      405              410              415
Asp Asn Pro Arg His His Gly Leu Ala Ala His Ser Ser Gly Glu Glu
      420              425              430
Arg Glu Ile Gln Tyr Ala Pro Leu Ser Phe His Lys Gly Glu Pro Gln
      435              440              445
Asp Leu Ser Gly Gln Glu Ala Thr Asn Asn Glu Tyr Ser Glu Ile Lys
      450              455              460
Ile Pro Lys *
465      467

```

```

<210> 926
<211> 79
<212> PRT
<213> Homo sapiens

```

```

<400> 926
Met Arg Met Leu Leu Thr Leu Gly Gly Leu Pro Gln Met Cys Leu Lys
 1              5              10              15
Phe His Gly Thr Pro Leu Thr Cys Pro Gln Gly Val Pro Cys Pro His
      20              25              30
Asp Ser Gln Arg Ile Gln Gly Ile Pro Lys Ala Pro Thr Gly Arg Glu
      35              40              45
Phe Leu Ala Gly Pro Gln Arg Val Pro Phe Pro Trp Leu Arg Ser Pro
      50              55              60
Ala His Val Arg Gly Gln Pro Ser Pro Gly Gly Pro Thr Pro Gly
      65              70              75              79

```

```

<210> 927
<211> 85
<212> PRT
<213> Homo sapiens

```

```

<400> 927
Met Leu Cys Trp Lys Thr Thr Ser Gly Arg Leu Lys Asp Ile Leu Ala
 1              5              10              15
Ile Leu Leu Thr Asp Val Leu Leu Leu Leu Gln Glu Lys Asp Gln Lys
      20              25              30
Tyr Val Phe Ala Ser Val Asp Ser Lys Pro Pro Val Ile Ser Leu Gln
      35              40              45
Lys Leu Ile Val Arg Glu Val Ala Asn Glu Glu Lys Ala Met Phe Met
      50              55              60
Ile Ser Ala Ser Leu Gln Gly Pro Glu Cys Ile Ala Ala Ala Arg Glu
      65              70              75              80
Asp Pro Ser Lys Gln
      85

```

```

<210> 928
<211> 69
<212> PRT
<213> Homo sapiens

```

<400> 928
 Met Gln Gln Pro Glu Val Lys Thr Trp Gly Gly Val Val Thr Ala Ala
 1 5 10 15
 Met Val Ile Ala Leu Ala Val Tyr Met Gly Thr Gly Ile Cys Gly Phe
 20 25 30
 Leu Thr Phe Gly Ala Ala Val Asp Pro Asp Val Leu Leu Ser Tyr Pro
 35 40 45
 Ser Glu Asp Met Ala Val Ala Val Ala Arg Ala Leu Ile Ile Leu Ser
 50 55 60
 Val Leu Thr Cys Ile
 65 69

<210> 929
 <211> 47
 <212> PRT
 <213> Homo sapiens

<400> 929
 Met Gln Met Trp Trp Leu Gly Ala Gln Ser Ala Gly Arg Cys Trp Leu
 1 5 10 15
 Arg Ala Arg Thr Ala Thr Ser Trp Trp Thr Cys Ser Trp Lys Arg Leu
 20 25 30
 Val Arg Gly Cys Cys Gly Arg Lys Thr Ser Ser Leu Val Trp *
 35 40 45 46

<210> 930
 <211> 50
 <212> PRT
 <213> Homo sapiens

<400> 930
 Met Arg Asn Leu Ser Gln Arg Val Thr Phe Arg Met Val Phe Ala Ala
 1 5 10 15
 Cys Ser Arg Tyr Ser Arg Asn Met Gln Pro Cys Cys Val Leu Ile Phe
 20 25 30
 Leu Lys Ile Leu Leu Cys Leu Phe Tyr Gln Ser Val Gly Gln Phe Ala
 35 40 45
 Asn *
 49

<210> 931
 <211> 96
 <212> PRT
 <213> Homo sapiens

<400> 931
 Met Ser Leu Cys Leu Ala Phe Leu Leu His Trp Gly His Phe Arg Thr
 1 5 10 15
 Cys Pro Leu Ser His Val Glu Met His Leu Tyr Pro Lys Arg Cys Pro
 20 25 30
 Gln Arg Asn Ala Glu Ser Arg Trp Ser Pro Ala Leu Val His Cys Ser
 35 40 45
 Arg His Ile Val Gln Val Ser Pro Ser Ser Ser Ser Ile Glu Ala Glu
 50 55 60
 Gly Ser Arg Gly Ser Asp Phe Trp Gly Asp Gly Cys Leu Gly Arg Val

65				70				75				80			
Leu	Pro	Pro	Ser	Ile	His	Val	Thr	Ser	Cys	Ser	Ala	Glu	Thr	Pro	Ala
				85					90					95	96

<210> 932
 <211> 189
 <212> PRT
 <213> Homo sapiens

<400> 932

Met	Val	Pro	Gly	Ala	Ala	Gly	Trp	Cys	Cys	Leu	Val	Leu	Trp	Leu	Pro
1				5					10					15	
Ala	Cys	Val	Ala	Ala	His	Gly	Phe	Arg	Ile	His	Asp	Tyr	Leu	Tyr	Phe
			20					25					30		
Gln	Val	Leu	Ser	Pro	Gly	Asp	Ile	Arg	Tyr	Ile	Phe	Thr	Ala	Thr	Pro
		35					40					45			
Ala	Lys	Asp	Phe	Gly	Gly	Ile	Phe	His	Thr	Arg	Tyr	Glu	Gln	Ile	His
	50					55					60				
Leu	Val	Pro	Ala	Glu	Pro	Pro	Glu	Ala	Cys	Gly	Glu	Leu	Ser	Asn	Gly
65					70				75					80	
Phe	Phe	Ile	Gln	Asp	Gln	Ile	Ala	Leu	Val	Glu	Arg	Gly	Gly	Cys	Ser
			85					90						95	
Phe	Leu	Ser	Lys	Thr	Arg	Val	Val	Gln	Glu	His	Gly	Gly	Arg	Ala	Val
			100					105					110		
Ile	Ile	Ser	Asp	Asn	Ala	Val	Asp	Asn	Asp	Ser	Phe	Tyr	Val	Glu	Met
		115					120					125			
Ile	Gln	Asp	Ser	Thr	Gln	Arg	Thr	Ala	Asp	Ile	Pro	Ala	Leu	Phe	Leu
	130					135					140				
Leu	Gly	Arg	Asp	Gly	Tyr	Met	Ile	Arg	Arg	Ser	Leu	Glu	Gln	His	Gly
145					150					155				160	
Leu	Pro	Trp	Ala	Ile	Ile	Ser	Ile	Pro	Val	Asn	Val	Thr	Ser	Ile	Pro
			165					170						175	
Thr	Phe	Glu	Leu	Leu	Gln	Pro	Pro	Trp	Thr	Phe	Trp	*			
			180					185			188				

<210> 933
 <211> 63
 <212> PRT
 <213> Homo sapiens

<400> 933

Met	Ala	Cys	Cys	Leu	Pro	Cys	Arg	Ala	Phe	Pro	Ala	Tyr	Pro	Thr	Gly
1				5					10					15	
Val	Trp	Pro	Thr	Thr	Trp	Leu	Trp	Cys	Trp	Ala	Val	Leu	Pro	Ile	Pro
			20					25					30		
Trp	Pro	Ala	Ser	Trp	Pro	Trp	Val	Cys	Cys	Ala	Gly	Pro	Trp	Gln	Gly
		35					40				45				
Trp	Ala	Ala	Ser	Leu	Cys	Trp	Ala	Cys	Ser	Val	Gly	Ala	Thr	*	
	50					55					60		62		

<210> 934
 <211> 100
 <212> PRT
 <213> Homo sapiens

<400> 934

```

Met Asp Trp Asn Leu Gln Phe Ser Leu Leu Leu Trp Ala Thr Ala Asp
 1           5           10           15
Ile Ser Asp Gln Leu Phe Gln Pro Pro Gln Lys Phe Ser Trp Asp Pro
           20           25           30
Leu Glu Ser Ala Leu Cys Leu Tyr Ser Ser Gly Ser Ala Lys Asp Leu
           35           40           45
Lys Gly Glu Met Gln Ser Phe Trp Tyr Pro Ala Arg Lys Ser Pro Pro
           50           55           60
Leu His Leu Pro Ala Leu Gln Leu Phe Tyr Phe Gly Glu Leu Pro Cys
           65           70           75           80
Lys Phe Leu Pro Ala Leu Val Val Pro Gly Ser Thr Leu Pro Pro Ser
           85           90           95
Arg Pro Leu *
           99

```

<210> 935

<211> 86

<212> PRT

<213> Homo sapiens

<400> 935

```

Met Lys Ile Thr Gly Gly Leu Leu Leu Leu Cys Thr Val Val Tyr Phe
 1           5           10           15
Cys Ser Ser Ser Glu Ala Ala Ser Leu Ser Pro Lys Lys Val Asp Cys
           20           25           30
Ser Ile Tyr Lys Lys Tyr Pro Val Val Ala Ile Pro Cys Pro Ile Thr
           35           40           45
Tyr Leu Pro Val Cys Gly Ser Asp Tyr Ile Thr Tyr Gly Asn Glu Cys
           50           55           60
His Leu Cys Thr Glu Ser Leu Lys Ser Asn Gly Arg Val Gln Phe Leu
           65           70           75           80
His Asp Gly Ser Cys *
           85

```

<210> 936

<211> 344

<212> PRT

<213> Homo sapiens

<400> 936

```

Met Trp Ala Ala Ala Gly Gly Leu Trp Arg Ser Arg Ala Gly Leu Arg
 1           5           10           15
Ala Leu Phe Arg Ser Arg Asp Ala Ala Leu Phe Pro Gly Cys Glu Arg
           20           25           30
Gly Leu His Cys Ser Ala Val Ser Cys Lys Asn Trp Leu Lys Lys Phe
           35           40           45
Ala Ser Lys Thr Lys Lys Lys Val Trp Tyr Glu Ser Pro Ser Leu Gly
           50           55           60
Ser His Ser Thr Tyr Lys Pro Ser Lys Leu Glu Phe Leu Met Arg Ser
           65           70           75           80
Thr Ser Lys Lys Thr Arg Lys Glu Asp His Ala Arg Leu Arg Ala Leu
           85           90           95
Asn Gly Leu Leu Tyr Lys Ala Leu Thr Asp Leu Leu Cys Thr Pro Glu
           100           105           110
Val Ser Gln Glu Leu Tyr Asp Leu Asn Val Glu Leu Ser Lys Val Ser

```

```

      115              120              125
Leu Thr Pro Asp Phe Ser Ala Cys Arg Ala Tyr Trp Lys Thr Thr Leu
      130              135              140
Ser Ala Glu Gln Asn Ala His Met Glu Ala Val Leu Gln Arg Ser Ala
145              150              155              160
Ala His Met Arg His Leu Leu Met Ser Gln Gln Thr Leu Arg Asn Val
      165              170              175
Pro Pro Ile Val Phe Val Gln Asp Lys Gly Asn Ala Ala Leu Ala Glu
      180              185              190
Leu Asp Gln Leu Leu Ala Val Ala Asp Phe Gly Pro Arg Asp Glu Arg
      195              200              205
Asp Asn Phe Val Gln Asn Asp Phe Arg Asp Pro Asp Ala Pro Gln Pro
      210              215              220
Cys Gly Thr Thr Glu Pro Thr Thr Ser Ser Ser Leu Cys Gly Ile Asp
225              230              235              240
His Glu Ala Leu Asn Lys Gln Ile Met Glu Tyr Lys Arg Arg Lys Asp
      245              250              255
Lys Gly Leu Gly Gly Leu Val Trp Gln Gly Gln Val Ala Glu Leu Thr
      260              265              270
Thr Gln Met Gln Lys Gly Arg Lys Arg Ala Lys Pro Arg Leu Glu Gln
      275              280              285
Asp Ser Ser Leu Lys Ser Tyr Leu Ser Gly Glu Glu Val Glu Asp Asp
290              295              300
Leu Asp Leu Val Gly Ala Pro Glu Tyr Glu Cys Tyr Ala Pro Asp Thr
305              310              315              320
Glu Glu Leu Glu Ala Glu Arg Gly Gly Gly Arg Thr Glu Asp Gly His
      325              330              335
Ser Cys Gly Ala Ser Arg Glu *
      340              343

```

<210> 937
 <211> 58
 <212> PRT
 <213> Homo sapiens

```

      <400> 937
Met Thr Ala Gln His His Ser Ile Ala Val Leu Leu Leu Asn Leu Glu
  1              5              10              15
Val Thr Cys Glu Cys Met Glu Tyr Asn Lys Val Phe Tyr Ser Gly Ser
      20              25              30
Phe Ala Ser Thr Ser Phe Leu Ile Gly Tyr Cys Ser Ser Ser Ser Gly
      35              40              45
Phe Tyr Phe Val Gln Pro Ser Arg Pro *
      50              55              57

```

<210> 938
 <211> 77
 <212> PRT
 <213> Homo sapiens

```

      <400> 938
Met Leu Ala His Leu Ser Phe Glu Arg Ser Leu Ile Leu His Leu Ile
  1              5              10              15
Phe Ser Gly Ile Ala Val Ser Ile Lys Ala Leu Thr Lys Thr Trp Met
      20              25              30
Pro Pro Glu Met Gly Ser Ser Pro Val Tyr Lys Ala Phe Ser Leu Leu
      35              40              45
Gln Cys Arg Leu Ser Ala Gln Lys Trp Gly Ser Cys His Ser Gln Asn

```

50 55 60
 Thr Leu His Trp Pro Val Trp Gly Pro Gln Thr Thr Leu
 65 70 75 77

<210> 939
 <211> 104
 <212> PRT
 <213> Homo sapiens

<400> 939
 Met Ala Leu Leu His Ile Cys Val Gly His Pro Leu Leu Ser Phe Pro
 1 5 10 15
 Lys Ala Gly Asp Phe Ser Phe Ser Ser Gln Asp Asp Pro Ser Glu Leu
 20 25 30
 Thr Ala Gly Ala Lys Asp Lys Glu Phe Ser Cys Leu Leu Val Ile Cys
 35 40 45
 Leu Gln Pro Ala Pro Ser Thr Arg Ser Leu Phe Ser Trp Gln Leu Phe
 50 55 60
 Leu Leu Ser Phe Ser Leu Val Ser Phe Thr Leu Ile Tyr Arg Gly Glu
 65 70 75 80
 Phe Lys Lys Ser Gly Glu Ala Lys Asp Tyr Leu Thr Gln Val Gln Gly
 85 90 95
 Pro Ile Asp Cys Gly Lys Leu Leu
 100 104

<210> 940
 <211> 92
 <212> PRT
 <213> Homo sapiens

<400> 940
 Met Phe Arg Ser Asn Pro Gly Phe Phe Phe Phe Cys Cys Cys Lys Ser
 1 5 10 15
 Cys Ile Leu Ala Ile Ser Leu Gly Glu Ile Pro Arg Asn Glu Phe Thr
 20 25 30
 Glu Asn Met Ser Leu Arg Glu Ser Glu Asp Leu Lys Pro Asp Leu Ser
 35 40 45
 Ala Phe Lys Ser Ser Ala Leu Tyr Thr Asp Val Ser Ser Pro Val Phe
 50 55 60
 Phe Thr Tyr Gln Asn Ser Arg Thr Leu Pro Glu Lys Pro Gly Arg Tyr
 65 70 75 80
 Cys Ser Thr Pro Val Ser Cys Phe Ser Pro Gly *
 85 90 91

<210> 941
 <211> 79
 <212> PRT
 <213> Homo sapiens

<400> 941
 Met Cys Arg Leu Tyr Ser Cys Ala Arg Met Pro Leu Phe Ser Thr Val
 1 5 10 15
 Leu Phe Ser Asn Val Tyr Ile Asn Asp Phe Leu Leu Gln Lys Pro Glu
 20 25 30
 Asn Thr Thr Ser Gln Pro Leu Ser Asn Gln Arg Val Val Glu Val Ala

35 40 45
 Ile Pro His Val Gly Lys Phe Met Ile Glu Ser Lys Glu Gly Tyr
 50 55 60
 Asp Asp Glu Val Pro Phe Thr Ala Leu Cys Thr Ile Ala Thr *
 65 70 75 78

<210> 942
 <211> 113
 <212> PRT
 <213> Homo sapiens

<400> 942
 Met Gly Ile Gln Trp Thr Cys Glu Trp Pro Ser Ser Leu Ser Pro Gly
 1 5 10 15
 Trp Lys Phe Ile Ala Cys Leu Trp Phe Ser Met Trp Gly Ser Arg Pro
 20 25 30
 Pro Leu Ser Gln Ala Met Ser His Lys Gln Trp Pro Met Leu Cys Ser
 35 40 45
 Ser Ile Ser Asn Pro Glu Ala Ser Gly Thr Glu Leu Phe Thr Tyr His
 50 55 60
 Phe His Met Met Gly Tyr Ile Glu Arg Phe Trp Pro Thr Glu Glu Leu
 65 70 75 80
 Ala Gln Arg Cys Ser Leu His Lys Glu Leu Pro Cys Thr Val Phe Thr
 85 90 95
 Glu Lys His Cys Ser Cys Thr Phe Leu Met Val Phe Gly Val Cys Thr
 100 105 110 112
 *

<210> 943
 <211> 201
 <212> PRT
 <213> Homo sapiens

<400> 943
 Met Gln Gly Met Lys Thr Gln Leu Ile Gln Leu Ser Thr Leu Leu Arg
 1 5 10 15
 Leu Leu Asp Ser Gly Phe Cys Ser Tyr Leu Glu Ser Gln Asp Ser Gly
 20 25 30
 Tyr Leu Tyr Phe Cys Phe Arg Trp Leu Leu Ile Arg Phe Lys Arg Glu
 35 40 45
 Phe Ser Phe Leu Asp Ile Leu Arg Leu Trp Glu Val Met Trp Thr Glu
 50 55 60
 Leu Pro Cys Thr Asn Phe His Leu Leu Leu Cys Cys Ala Ile Leu Glu
 65 70 75 80
 Ser Glu Lys Gln Gln Ile Met Glu Lys His Tyr Gly Phe Asn Glu Ile
 85 90 95
 Leu Lys His Ile Asn Glu Leu Ser Met Lys Ile Asp Val Glu Asp Ile
 100 105 110
 Leu Cys Lys Ala Glu Ala Ile Ser Leu Gln Met Val Lys Cys Lys Glu
 115 120 125
 Leu Pro Gln Ala Val Cys Glu Ile Leu Gly Leu Gln Gly Ser Glu Val
 130 135 140
 Thr Thr Pro Asp Ser Asp Val Gly Glu Asp Glu Asn Val Val Met Thr
 145 150 155 160
 Pro Cys Pro Thr Ser Ala Phe Gln Ser Asn Ala Leu Pro Thr Leu Ser
 165 170 175
 Ala Ser Gly Ala Arg Asn Asp Ser Pro Thr Gln Ile Pro Val Ser Ser


```

      180      185      190
Asp Val Cys Arg Leu Thr Pro Ala *
      195      200

```

```
<210> 944
<211> 99
<212> PRT
<213> Homo sapiens
```

[illegible]

PATENT COOPERATION TREATY

PCT

DECLARATION OF NON-ESTABLISHMENT OF INTERNATIONAL SEARCH REPORT

(PCT Article 17(2)(a), Rules 13ter and 39)

Applicant's or agent's file reference 21272-017	IMPORTANT DECLARATION	Date of filing (day/month/year) 06 JUN 2001
International application No. PCT/US01/02623	International filing date (day/month/year) 25 JANUARY 2001	(Earliest) Priority Date (day/month/year) 25 JANUARY 2000
International Patent Classification (IPC) or both national classification and IPC IPC(7): C12P 19/34 and US Cl.: 435/91.2		
Applicant HYSEQ, INC.		

This International Searching Authority hereby declares, according to Article 17(2)(a), that **no international search report will be established on the international application for the reasons indicated below.**

1. ☐ The subject matter of the international application relates to:
 - a. ☐ scientific theories.
 - b. ☐ mathematical theories.
 - c. ☐ plant varieties.
 - d. ☐ animal varieties.
 - e. ☐ essentially biological processes for the production of plants and animals, other than microbiological processes and the products of such processes.
 - f. ☐ schemes, rules or methods of doing business.
 - g. ☐ schemes, rules or methods of performing purely mental acts.
 - h. ☐ schemes, rules or methods of playing games.
 - i. ☐ methods for treatment of the human body by surgery or therapy.
 - j. ☐ methods for treatment of the animal body by surgery or therapy.
 - k. ☐ diagnostic methods practiced on the human or animal body.
 - l. ☐ mere presentations of information.
 - m. ☐ computer programs for which this International Searching Authority is not equipped to search prior art.
2. ☐ The failure of the following parts of the international application to comply with prescribed requirements prevents a meaningful search from being carried out:

☐ the description
☐ the claims
☐ the drawings
3. ☒ The failure of the nucleotide and/or amino acid sequence listing to comply with the standard provided for in Annex C of the Administrative Instructions prevents a meaningful search from being carried out.

☐ the written form has not been furnished or does not comply with the standard.
☒ the computer readable form has not been furnished or does not comply with the standard.
4. Further comments:

Name and mailing address of the ISA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231 Facsimile No. (703) 305-3230	Authorized officer <div style="text-align: right;"> TERRY J. DEY PARALEGAL SPECIALIST TECHNOLOGY CENTER 1600 </div> JEFFREY S. LUNDGREN Telephone No. (703) 305-1435
---	---